COX CASTLE NICHOLSON

Cox, Castle & Nicholson LLP
555 California Street, 10th Floor
San Francisco, California 94104-1513
P: 415.262.5100 **F:** 415.262-5199

R. Clark Morrison
415.262.5113
cmorrison@coxcastle.com

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California Energy Commission
Attn: Chris Beale, DRECP Acting Executive Director
Dockets Office, MS-4
Docket No. 09-RENEW EO-01
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Comments on Draft DRECP and NEPA/CEQA EIR/EIS

Dear Mr. Beale:

On behalf of the California Wind Energy Association ("CalWEA"), we hereby submit the following comments on the Draft Desert Renewable Energy Conservation Plan ("Draft DRECP" or the "Draft Plan") and Environmental Impact Report/Environmental Impact Statement ("EIR/EIS").

CalWEA is a non-profit corporation supported by members of the wind energy industry, including project developers and owners, turbine manufacturers, support contractors, and others. Over the past six years, CalWEA has made substantial and consistent efforts to work constructively with the DRECP's Renewable Energy Action Team (REAT) at every stage of the process culminating in the Draft Plan. Our overarching goal was, and remains today, to preserve sufficient areas for wind development in high wind resource areas while fully evaluating and appropriately addressing all potential conflicts.

To that end, CalWEA served on the Stakeholder Committee, attending every meeting. CalWEA's participation was informed by a special membership committee comprised of wind industry siting professionals. CalWEA invested a substantial portion of its resources in the process, devoting staff time and effort, engaging expert biological consultants and obtaining advice from legal experts familiar with the regulatory frameworks being contemplated. During this time, CalWEA produced multiple substantive proposals regarding the Draft Plan's treatment of wind energy for consideration by the REAT and the other stakeholders.

CalWEA's proposals provided clear pathways for the Draft Plan to recognize the significant amount of wind energy that will need to come from the desert to achieve California's greenhouse gas (GHG) reduction goals. The proposals clearly articulated how the Draft Plan could allow the siting-area flexibility that must be provided to enable such development. Further, the proposals

demonstrated the need for the Draft Plan to evaluate the limited terrestrial footprint of wind energy projects that enables compatibility with other DRECP objectives. Unfortunately, the Draft Plan did not adequately evaluate CalWEA's proposals or any other proposal that appropriately evaluates wind energy. This was a missed opportunity for the lead agencies to hold constructive dialogue with the wind industry and other interested stakeholders to develop a workable plan for tapping California's most valuable wind energy resources.

Further, the Draft Plan dramatically underestimates the amount of GHG reductions that will be required from the electricity sector to achieve California's ambitious goals to address the peril of climate change. Moreover, the Draft Plan is not informed by any rigorous multi-sector analysis of the technical feasibility and cost of achieving California's goals and, in particular, what will be required of the electricity sector in order to maintain electric-grid reliability and affordable utility rates. Nor does the Draft Plan recognize other studies that have been conducted indicating that far more wind energy than what the Draft Plan recognizes is likely to be required to achieve a mix of generation resources that supports grid reliability while minimizing costs.

Finally, the Draft Plan suffers from a number of additional legal defects. Key among these defects is the fact that the entire structure of the Draft Plan is undermined by its failure to properly analyze local land use policies and practices while the Draft Plan relies heavily on such entities' lands for the development of utility-scale renewable energy projects. The Draft Plan provides virtually no analysis of overall funding assurances to implement its proposed mitigation programs and provides for no contingency in the event of a funding shortfall. Moreover, the environmental analysis of the Draft Plan is deficient because, among other things, it fails to properly consider a reasonable range of alternatives, impermissibly defers the analysis and mitigation of environmental impacts, and fails to properly consider the cumulative effects associated with the DRECP. These and other legal defects require wholesale reconsideration and recirculation of the Draft Plan. CalWEA is optimistic that, with earnest dialogue, the Final Plan can meet its stated goals of planning for both renewable energy development and conservation in support of our shared objective of avoiding the worst impacts of climate change while we still can. In the alternative, the agencies should adopt the "No Action Alternative" and preserve the status quo.

1. SUPPORTING ACHIEVEMENT OF CALIFORNIA'S GREENHOUSE-GAS-REDUCTION GOALS.

The Draft Plan is premised on the need to significantly increase the use of renewable energy and reduce the burning of fossil fuels in order to achieve California's long-range goal of reducing the 1990 level of GHG emissions by 80% by 2050.[1] The Draft Plan aims to determine how much

[1] Draft Plan at p. I.3-33 (citing California Executive Order S-3-05, which establishes a long-range goal of reducing 1990 levels of GHG emissions by 80% by 2050).

renewable energy might be needed to meet this goal and how much of this need might be met through development in the Plan Area.[2] The CEC developed a "renewable energy acreage calculator" for this purpose and identified a need to plan for 20,000 megawatts (MW) of new renewable energy resources in the Plan Area by 2040, out of a total estimated statewide need of 52,059 MW, assuming that 25% of generation will come from out-of-state sources.[3] Each of the five Draft Plan Alternatives include a different mix of solar, wind and geothermal generation capacity, which together comprise the planning figure, with the amount of wind energy ranging from 398 MW under Alternative 1 to 5,810 MW under Alternative 2.[4]

Both the overall planning target of 20,000 MW by 2040 and the wind-specific planning targets are clearly insufficient to support achievement of California's long-range GHG-reduction goals by 2050, as reflected in Governor Brown's Executive Order S-3-05 ("Executive Order"). The "acreage calculator" appropriately acknowledges that it is not a "crystal ball" that can predict the future, and that its aim is, rather, to "inform and prepare for a number of different futures that might be."[5] Yet the calculator has produced figures that do not begin to achieve this objective. As discussed below, its 20,000-MW renewable energy planning target is based on an overall estimate of required electric-sector carbon reductions that studies relied upon by the California Air Resources Board have shown to be too low. More specific assumptions further err significantly in the direction of underestimating the quantity of renewable energy that will be needed statewide, and in the desert. The low fraction of the 20,000 MW that is estimated to be met with wind energy is quite simply arbitrary. Had any economic or reliability analysis been conducted – or readily available analyses been consulted – a far greater need for wind energy would have been shown.

Finally, the Draft Plan also ignores the need to account for a *doubling* of renewable energy that the Draft Plan itself anticipates will be needed between 2040 and 2050. By overlooking this plainly foreseeable additional amount of renewable energy that will be needed to meet these goals, the EIR/EIS fails to adequately consider the cumulative impacts of the Draft Plan under both CEQA and NEPA.

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[2] Draft Plan Executive Summary at p. 16.

[3] Draft Plan Appendix F3 at p. 21.

[4] The "No Action" Alternative shows 5,442 MW of wind development occurring. (Draft Plan Appendix F2 at p.F2-4.) Though a slightly lower figure than Alternative 2 would purportedly enable, the No Action Alternative does not constrain wind energy development as would occur under Alternative 2; therefore, the No Action Alternative figure – or greater – is much more likely to be achieved.

[5] Draft Plan Appendix F3 at pp. 1 and 3.

a. The Draft Plan Underestimates the Amount of Carbon Reductions that Will Be Required in the Electricity Sector by 2050.

The Draft Plan's renewable energy planning figures derive from the "July 2012 Scenarios,"[6] a document that is referenced, but not included, in Appendix F3, the DRECP Acreage Calculator. The July 2012 Scenarios document candidly states that it represents a **"**plausible *lower bound* for DRECP planning purposes."[7] (Emphasis added.) Using a lower-bound figure is not in keeping with the notion stated in Appendix F3 that the planning figures "prepare for a number of different futures that might be."[8] Moreover, the "lower bound" assumption for the 2050 carbon reductions necessary to achieve California's GHG goals is clearly too low, and therefore not "plausible." This assumption – that California's economy-wide GHG emissions reduction target of 80 percent from 1990 levels will apply equally to the electricity sector – dramatically lowers the estimated need for renewable energy, i.e., by 20%.

While the Draft Plan acknowledges vaguely that the electricity sector "may be ultimately called upon to reduce emissions by a greater or lesser percentage,"[9] the California Air Resources Board has already indicated that meeting the 2050 goal will require the electricity sector to be "essentially zero-carbon."[10] The studies cited by the ARB supporting that statement have recently been bolstered by another major study by Energy and Environmental Economics, Inc. ("E3") in collaboration with Lawrence Berkeley National Laboratory and the Pacific Northwest National Laboratory. This study concludes: "meeting the 2050 target requires almost fully decarbonizing electricity supply and switching a large share of end uses from direct combustion of fossil fuels to electricity (e.g., electric vehicles), or fuels produced from electricity (e.g., hydrogen from electrolysis)."[11] E3 was recently commissioned by four state agencies to specifically study all of California's economic sectors to inform state policy setting to support

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6 "Desert Renewable Energy Conservation Plan: Renewable Energy Acreage Calculator and the 2040 Revised Scenario's Renewable Portfolio, July 27, 2012" ("July 2012 Scenarios").

7 July 2012 Scenarios at p. 1.

8 Draft Plan Appendix F3 at p. 1.

9 Draft Plan Appendix F3 at p. 8, footnote 2.

10 ARB, First Update to the Climate Change Scoping Plan at p. 33.

11 Williams, J.H., B. Haley, F. Kahrl, J. Moore, A.D. Jones, M.S. Torn, H. McJeon (2014). *Pathways to deep decarbonization in the United States.* The U.S. report of the Deep Decarbonization Pathways Project of the Sustainable Development Solutions Network and the Institute for Sustainable Development and International Relations. Available at: https://ethree.com/publications/index_US2050.php or www.deepdecarbonization.org/.

the state's GHG goals; in an initial summary of its findings, E3 confirmed that these same findings are broadly applicable in California.[12]

Therefore, the basis for the Draft Plan's renewable energy planning goal is too low by 20%. This amount of GHG reduction equates to approximately 54,000 GWh of renewable energy needed[13] – equivalent to the entire amount of renewable energy that the DRECP is planning for in 2040. Assuming that half of that additional amount would need to occur by 2040, the 2040 planning goal would need to rise by 50%.

b. The Draft Plan Underestimates the Amount of Renewable Energy Needed by 2040.

In addition to substantially underestimating the 2050 electric sector GHG-reduction requirement, many other questionable assumptions lead to 2040 renewable energy planning targets that underestimate the quantity of renewable energy that will be required. For example:

- The Draft Plan "does not consider the potential impacts of climate change on the amount of hydroelectric energy available. Reductions in hydroelectric energy would require additional energy from zero-carbon resources in order to leave GHG emissions unchanged."[14] This assumption fails to take into account the reduction in hydroelectric output that is likely to occur by 2040 as a result of climate change, which could reduce output by 25% or more.[15] Hydropower currently provides +/- 12% of California's electricity supply, varying with annual precipitation.[16]
- A liberal assumption about the ability to use GHG offsets "may overstate the amount of sectorial carbon emissions that are allowed by more than 5 million metric tons, and thus

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[12] E3, "Summary of the California State Agency's PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios" (January 26, 2015). Available at: http://www.energy.ca.gov/commission/fact_sheets/documents/E3_Project_Overview_20150130.pdf.

[13] This figure calculated based on the statement on p. 8 in Draft Plan Appendix F3 that "A five-percentage point change in the required [GHG] reduction changes the renewable energy need by roughly 13,500 GWh (8%)."

[14] Vidaver, Dave, CEC, "2040 and 2050 Acreage Needs for Renewable Generation [sent to Covered Activities and Resource Mapping working groups on October. 21, 2011.]" ("October 2011 Scenarios") at p. 1. This document is posted at http://www.drecp.org/meetings/2011-12-05_meeting/presentations/.

[15] See, e.g., Kaveh Madani and Jay R. Lund, "Estimated impacts of climate warming on California's high-elevation hydropower," *Climatic Change* (2010) 102:521–538 (available at: http://www.springerlink.com/content/877054280270g517/fulltext.pdf); and CEC Consultant Report, "Potential Changes In Hydropower Production From Global Climate Change In California And The Western United States." Prepared in support of the 2005 Integrated Energy Policy Report Proceeding (Docket # 04-IEPR-01G) June 2005 (CEC-700-2005-010).

[16] California Energy Commission, California Electricity Statistics & Data, Electricity Generation by Resource Type, 1983-2013.

underestimate the required amount of renewable (or other zero-carbon) energy needed in 2040 by 13,000 GWh (8%).[17]

- The Draft Plan assumes that existing in-state renewables would be generating an amount equal to the total amount of in-state renewable generation in 2010.[18] Some existing resources may be more expensive than new resources.[19] Existing biomass facilities have struggled to compete successfully in recent years; if this situation continues, these project sites will not be repowered. The assumption also does not take into account likely declines in production at the Geysers geothermal facility, where industry experts estimate that the present generation capacity of 850 MW will decline to about 700 MW over the next two decades.[20]

c. The Draft Plan Fails to Properly Analyze or Plan For Reasonably Possible Renewable Energy Development Scenarios, Resulting in Unduly Low Planning Figures for Wind Energy.

i. The renewable resource planning figures for 2040 are arbitrary and unreasonably low for wind energy.

The Draft Plan makes many arbitrary assumptions that minimize the planning figures for wind energy such that the Draft Plan would effectively cap California's wind energy development potential, regardless of market or policy circumstances.[21] The Draft Plan plans for just 3,070 MW of wind energy in the DRECP area, as compared to the 12,500 MW that may needed in 2040, as demonstrated by the compelling evidence and sound reasoning provided by CalWEA.[22] As discussed below, much more wind energy than what the Draft Plan would plan for is likely to be needed from the DRECP area to support achievement of California's GHG-reduction goals, which address the single largest threat to biological resources in the desert and elsewhere.

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[17] Draft Plan Appendix F3, p 7-8.

[18] Vidaver *supra* note 14**,** at p. 3

[19] Johnson, Aaron, PG&E, DRECP Energy Panel Transcript, July 13, 2012 at p. 148. Available at: http://www.drecp.org/meetings/2012-07-13_workshop/presentations/.

[20] Subir K. Sanyal and Steven L. Enedy, "Fifty Years Of Power Generation At The Geysers Geothermal Field, California – The Lessons Learned Proceedings," Thirty-Sixth Workshop on Geothermal Reservoir Engineering Stanford University, Stanford, California, January 31 - February 2, 2011. Available at http://pangea.stanford.edu/ERE/pdf/IGAstandard/SGW/2011/sanyal3.pdf.

[21] Appendix F-1, p. 14, states, "No more generation would be developed than is required to meet the target generation requirements. …The Plan Area would be expected to permit no more than 20,323 MWs of renewable energy generation (i.e., no more than that would be evaluated for permitting within the framework of the DRECP)."

[22] *See* CalWEA's April 17, 2012, Proposed DRECP Scenario for Wind Energy Resources; and CalWEA's August 16, 2012, Comments on the DRECP July 2012 Stakeholder Meeting and Materials.

Appendix F3, which purports to explain how the Draft Plan derived its renewable energy planning figures, essentially contains no analysis of how the document arrives at the mix of renewable resources that together constitute the 20,000 MW planning goal under each plan alternative. Nor is any reasonable analysis to be found in the October 2011 Scenarios[23] or July 2012 Scenarios referenced in Appendix F3. While the Appendix states that the amount of capacity assumed for each technology was "determined by the state of the technology, the economy, and relevant underlying policies,"[24] there is no discussion of these factors, let alone any analysis or even references to analyses.

Statements in Draft Plan documents clearly demonstrate how the planning goals were arbitrarily derived and are unreasonable:

- "Staff agrees that there is no reason that much more wind than the 14,000 MW assumed couldn't be developed. 14,000 MW was one reasonable assumption among many."[25]
- Assumed contributions from geothermal, biomass and rooftop solar are "strong (and probably overly optimistic)." [26]
- Geothermal capacity totaling 2,800 MW is fixed under every single alternative in the Draft Plan, despite the fact that the geothermal industry itself stated in a presentation to DRECP stakeholders that there is no certainty of the geothermal resource potential over 2,000 MW within the DRECP area.[27] The CEC's David Vidaver described the 7,000 MW statewide geothermal figure in the calculator as "stretching the envelope."[28] Replacing even 800 MW of geothermal from the DRECP area would require roughly three times that capacity in wind generation capacity, due to high geothermal capacity factors. This would add roughly 2,400 MW of wind capacity to the DRECP wind planning figure.
- "19,000 MW – 28,000 [sic] of wind is required [statewide, 2050], despite assuming both that base load renewable resources (geothermal, biomass) will be at levels that exceed current expectations regarding economic/technical potential, and distributed generation will far exceed current targets."[29]

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[23] Vidaver *supra* note 14.

[24] Draft Plan Appendix F3 at p. 5.

[25] Draft Plan Appendix F3 at p. 13. (It is not clear from the text what this 14,000-MW figure represents; however, CalWEA believes it refers to a 2011 2050 DRECP-area planning figure for wind energy under the 60/40 wind/solar assumption. CalWEA had provided an analysis supporting a 25,000-MW figure.)

[26] Draft Plan Appendix F3 at p. 11.

[27] "Geothermal Siting and Permitting Considerations in the DRECP Planning Area," Geothermal Energy Association, November 2011.

[28] November 9, 2011, DRECP Stakeholder Meeting.

[29] Vidaver *supra* note 14, at p. 1.

- After fixing levels of geothermal, biomass and distributed generation resources across the board at unreasonably high levels, remaining renewable energy needs were arbitrarily, and without any apparent analysis, divided between wind and solar "for purposes of illustration."[30] Two scenarios were created in the 2011 scenarios, one with a 60/40 solar/wind split and the other with a 40/60 solar/wind split. Without any explanation, the July 2012 Scenarios appear to have adopted the 60/40 solar/wind split, arbitrarily adopting the minimum wind planning figure of 8,350 MW, some 4,000 MW below the higher 40/60 wind figure of 12,500 MW.[31]
- Each of the renewable energy resources in the renewables mix generated from the December 2011 2040 scenarios was reduced on a pro-rata basis, rather than on any reasoned basis, in order to reconcile the mix with a 2012 revised estimate of the total amount of renewable energy needed that was 12% (23,000 GWh) lower than the 2011 estimates.[32] Rather than assuming, for example, that fewer higher-cost resources (e.g., geothermal or solar-DG) would be needed, reductions were made equally across the board. Thus, the 2011 low-side wind energy statewide planning goal of 8,350 MW was further reduced to 6,155 MW.[33,34]
- "Geothermal was maximized because it can provide benefits similar to base load generation."[35] No analysis was performed or referenced to support the assumption that base load power is necessarily preferable from a grid-operations standpoint at all, let alone preferable at any cost.[36] Geothermal power is expected to cost 50% more than in-

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[30] Vidaver *supra* note 14, at p. 5.

[31] Table 7 in the July 2012 Scenarios shows 8,350 MW of wind energy as the starting amount of wind energy from the December 5, 2011, scenarios with no mention of the two different solar/wind splits. That figure is then reduced to 6,155 MW in Table 9 for the revised 2012 scenario. The 2011 figures showed 8,350 MW in the Solar/Wind 60/40 split, and 12,500 for the Solar/Wind 40/60 split. See Vidaver *supra* note 14, at p. 6.

[32] July 2012 Scenarios at p. 13.

[33] Half of that 6,155 MW is assumed to be in the DRECP area (3,078 MW). That 3,078 MW apparently is the basis for the wind planning figures shown in Draft Plan Appendix F2, which range from 398 MW to 5,810 MW, with 3,070 MW in the Preferred Alternative.

[34] Each of the Alternatives plans for a capacity goal of 20,000 MW, placing the focus on production capacity, rather than actual energy production, which has a more direct correlation to reducing GHGs. The energy (MWh) targets under the various Alternatives vary by as much as 16%. A relatively "small" reduction in the amount of high-capacity-factor geothermal capacity that actually materializes could result in a large deficit in the renewable energy that may be needed to achieve targeted GHG reductions.

[35] Draft Plan Appendix F1 at p. F1-14.

[36] In addition, no analysis was provided regarding the voltage stability, inertia, frequency response and other grid services that are also provided by the modern power electronics in present-day wind projects – and how these characteristics may impact resource assessments for "base load" generation.

state wind energy in 2030.[37] Indeed, geothermal energy's lack of competitiveness is suggested by the No Action Alternative's geothermal figure of just 316 MW (as compared to 5,442 MW of wind). Thus, the Draft Plan anticipates that the DRECP itself will change market outcomes, rather than planning for the outcomes that are reasonably foreseeable. (These outcomes are discussed further in the next subsection.)

- "Distributed generation was maximized to assist with meeting state energy policy goals for this technology."[38] No state energy policy goals relevant to the 2040 timeframe have been adopted. No economic or grid-impact analysis was performed or referenced. Distributed generation (<20MW solar) is expected to cost at least 15% more than in-state wind energy in 2030.[39] High levels of solar energy on the grid can cause grid integration problems, as discussed below.

Two other factors affecting the wind planning figure that are briefly discussed in Appendix F3 – the share of each specific technology's in-state MW that is assumed to occur in the DRECP area, and the share of needed renewable energy that can be met with out-of-state resources – are also unrealistic.

First, the Draft Plan assumes that only 50% of expected wind development in California will occur in the DRECP area, despite the actually supportable assumption of 75% that CalWEA put forward in 2012.[40] Among other things, in its April 2012 comments regarding the Proposed DRECP Scenario for Wind Energy Resources, CalWEA pointed to the fact that the state's highest-quality wind resources are concentrated in the DRECP region and that 75% of development activity has been occurring inside the DRECP area, rather than elsewhere in the state.[41] Further, the major wind resource areas in California – in Solano County, the San Gorgonio Pass, the Altamont Pass, and the private-land areas of the Tehachapi Pass – are now largely built-out. Over 95% of California's nearly 6,000 MW of operating wind facilities have been built on private lands; the strong wind resources on California's federally owned lands remain almost entirely untapped.

Second, the DRECP Plan makes "a key assumption" that 25% of the renewable energy needed will come from out-of-state, but the Draft Plan also states several reasons why this assumption "may not prove feasible or practical."[42] The reasons provided include the fact that neighboring

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[37] E3 Report, *infra* note 46 at Table 19.

[38] Draft Plan Appendix F1 at p. F1-14.

[39] E3 Report, *infra* note 46 at Table 19.

[40] CalWEA, "Proposed DRECP Scenario for Wind Energy Resources" (April 17, 2012).

[41] Development activity in the DRECP area has slowed considerably in the past two years due to threats and uncertainties created by draft DRECP materials.

[42] July 2012 Scenarios at p. 11.

states will themselves increasingly rely on renewable resources, increasing competition for the highest-quality resources in those states. The Obama Administration's Environmental Protection Agency has since proposed GHG emissions standards for existing power plants (the "111(d)" rule) that will require all states to take action to lower their GHG emissions; these new regulations will certainly increase Western states' demand for renewable energy in the 2030 timeframe. Moreover, the EPA has not yet established which state will get credit for renewable energy that is exported from one state to another. Should the EPA decide that renewable energy will be credited to the state in which the facility exists, California would not be able to count out-of-state renewable energy towards its 111(d) compliance goals.

Should *any one* of the numerous assumptions above prove to be wrong, dramatically more wind energy from the DRECP area will be needed than the Draft Plan assumes. If several assumptions prove faulty, far more wind energy will be required. But the DRECP fails even to allow for the possibility that more wind energy may be needed, locking wind energy *permanently* out of California's energy future regardless of how that might affect achievement of California's GHG-reduction requirements.

If providing for the possibility that more wind energy may be needed by 2040 – either in addition to or replacing a portion of the other renewable technologies being planned for – would make it impossible to achieve the DRECP's other goals related to conservation and multiple-use,[43] then there would be no possibility of additional wind energy after 2040, because the plan assumes that *all* of the other land needs to be reserved for other uses. Further, the Draft Plan summarily dismisses any potential climate impacts of the DRECP in the 2040 timeframe by falsely asserting that the renewable energy development contemplated under the Plan will occur and displace fossil fuels.[44]

Recent case law requires a lead agency to take into account and analyze whether large-scale planning efforts conflict with Executive Order S-3-05 or would otherwise impair or impede the achievement of the Executive Order's goals. *Cleveland National Forest Found v. San Diego Association of Governments*, Case No. D063288 (4th Dist. Nov. 24, 2014). The EIS/EIR, however, does not provide any analysis to support the conclusion that putting 3 million acres currently available for solar and wind development completely off limits would not have any significant adverse impacts on the State's ability to achieve the goals set forth to implement the state's greenhouse-gas statute, AB 32, and the Executive Order. Nor does the plan address the possibility that its rigid planning figures for each technology will affect market outcomes, and thus the cost of renewable energy and GHG-reductions (e.g., the possibility that 2,800 MW of geothermal energy will not be developed due to economic or technological infeasibility while

[43] See discussion in section 2.d, below.

[44] Draft Plan, Chapter IV.3.3.

wind energy development in the desert would be effectively capped). Rather, the EIR/EIS is silent with respect to whether the State's climate goals can be achieved by 2050, considering the significant restrictions on wind and solar development in the DRECP area. This omission is prejudicial because it precludes informed decision-making and public participation. *See Cleveland National Forest Found.*, Case No. D063288, at pp. 14-20; *see also Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 463; *City of Long Beach v. Los Angeles Unified School District* (2009) 176 Cal.App.4th 889, 898.

Not only should such potential resource conflicts have been analyzed with respect to consistency with California's greenhouse gas goals, but also such lack of analysis impermissibly fails to consider all the reasonable foreseeable elements of the overall project, as well as fails to analyze the foreseeable cumulative effects of the Draft Plan, as required under both NEPA and CEQA.[45] *See Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 396 (1988); CEQA Guidelines, §§ 15065(a)(3), 15130(b)(1)(A), 15355(b); 40 C.F.R. § 1508.7.

Instead, as discussed below, the DRECP should properly recognize the limited environmental impacts of wind energy, enable site-specific conflict analysis, and be flexible enough to accommodate renewable energy market outcomes that will be influenced by state energy policy, electrical grid reliability requirements, and the relative cost-effectiveness of the various renewable energy technologies over the coming decades.

ii. Had a proper analysis been conducted, a need for significantly more wind energy in the DRECP area would have been shown.

The Draft Plan's proposed planning figures for wind energy are well below what might reasonably be anticipated based on current market activity and expert planning studies that take into account the economics and grid reliability impacts of the various renewable resources. Given the numerous uncertainties and arbitrary assumptions that were made to address them, as indicated above, a reasoned analysis – based upon facts rather than unsupported assumptions – would have demonstrated the need to plan for significantly more wind energy in order to provide for the real possibility that more wind energy might reasonably be needed.

A simple review of past utility procurement activity shows that the DRECP should plan for more wind energy. California's investor-owned utilities have largely procured sufficient renewable energy needed to comply with the state's current 33% Renewables Portfolio Standard (RPS) requirement by 2020. Looking at the relative contributions of wind, geothermal and solar

[45] CEQA requires an analysis of cumulative impacts resulting from the incremental effect of a project when added to other past, present, and reasonable future projects. 14 Cal. Code Regs. §§ 15065(a)(3); 15130(b)(1)(A); 15355(b). NEPA also requires an analysis of cumulative impacts resulting from the incremental impact of a project when added to other past, present, and reasonably foreseeable future projects. 40 C.F.R. § 1508.7.

(including PV, thermal and DG), utility compliance reports show that wind energy comprises more than double what is included in the DRECP Preferred Alternative – 36% vs. 16% of the portfolio mix. See Table A and Figure A below. Far less wind energy is included in most of the other Draft Plan alternatives, although wind constitutes 33% of the mix under Alternative 2. The No Action Alternative shows a 34% contribution from wind energy, indicating that the Draft Plan is not responding to the higher fraction of wind energy that would be anticipated under its own estimation of the status quo.

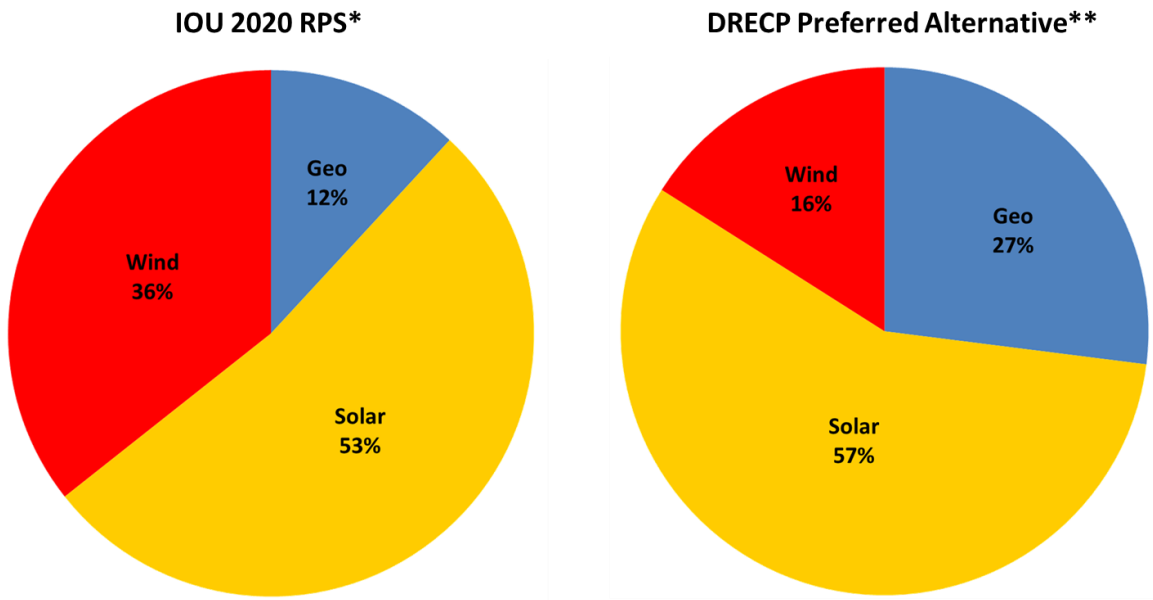
Table A. Share of the Mix: 2020 RPS vs. DRECP Preferred Alternative.

	IOU 2020 RPS*	DRECP Preferred Alternative**
Geothermal	12%	27%
Solar (PV, thermal, DG)	53%	57%
Wind	36%	16%

* Projected Investor-Owned Utility combined portfolio for 33% RPS in 2020. Source: August 2014 RPS Compliance Reports submitted by PG&E, SCE and SDG&E to the CPUC.

** Source: Draft Plan Appendix F2, table p. F2-3.

Figure A. Share of the Mix: 2020 RPS vs. DRECP Preferred Alternative.



* Projected Investor-Owned Utility Portfolio for 33% RPS in 2020. Source: August 2014 RPS Compliance Reports submitted by PG&E, SCE and SDG&E to the CPUC.

** DRECP Appendix F2, table p. F2-3.

Various projections of the California renewable resource mix under a 50% RPS in 2030 have been made, considering relative technology costs and electrical-grid integration impacts. A January 2014 study performed by the research consulting firm E3 for California's five major utilities (E3 Report) demonstrates that wind energy is very likely to play a more substantial role in a cost-effective 50% renewable resource portfolio than under the 33% RPS.[46] The E3 Report studied renewable energy scenarios heavily dominated by solar generation, finding that a high penetration of solar will cause severe integration issues requiring additional costly resources.[47] The utility-rate impact of E3's "Large Solar" scenario was found to be 14% in 2030, whereas the rate impact of E3's "Diverse" scenario – which includes far more wind energy – dropped to 9.1%. Wind energy comprises 30% of E3's Diverse scenario, double the fraction included in the Draft Plan's statewide reference case for 2040, which is the basis for the Draft's planning figures for the DRECP area. See Table B and Figure B below.

Indeed, more in-state wind energy is included in E3's Diverse renewables scenario in *2030* (nearly 10,000 MW)[48] than in the DRECP's statewide reference case for *2040* (8,350 MW).[49]

CalWEA found that further modifying E3's Diverse renewable resource mix could further reduce – by half – the total cost of a 50% renewable energy portfolio.[50] Under this more optimal mix, wind energy comprises 50% of renewable energy additions beyond the 33% targets, while solar additions comprise on the order of 30% of portfolio additions, and base load biomass and geothermal resources each comprise on the order of 10% of portfolio additions.

No such economic or reliability analyses were conducted for the Draft Plan as the 2040 renewable energy portfolios were constructed, nor were these or other readily available analyses apparently considered at all. These issues were, however, raised and discussed at the expert energy panel convened on July 13, 2012 for the DRECP.[51]

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[46] E3, *Investigating a Higher Renewables Portfolio Standard in California* (January 2014) ("E3 Report"), available at: http://www.ethree.com/public_projects/renewables_portfolio_standard.php.

[47] The same was true of California's development of its base load nuclear resources, which required concomitant development of pumped hydro storage resources to handle excess nighttime generation.

[48] E3 Report, Table 11. Out-of-state wind is assumed to provide another 4,000 MW.

[49] Vidaver *supra* note 14, at Table 4. Renewable energy from out-of-state was assumed to provide 25% of the renewables needed, reduced the total renewable energy required.

[50] CalWEA, "Investigating the Investigation of a Higher Renewables Portfolio Standard in California: A Review of the Five-Utility E3 Study," at Table 1 (April 2014), available at http://bit.ly/1kwt7YS.

[51] See, e.g., the presentations and associated reports discussed by Maureen Hand, National Renewable Energy Laboratory, and Andrew Mills of the Lawrence Berkeley National Laboratory at the DRECP Energy Roundtable Discussion: Infrastructure Planning, Cost & Market Implications of the Desert Renewable Energy Conservation Plan (July 13, 2012). Available at: http://www.drecp.org/meetings/2012-07-13_workshop/presentations/.

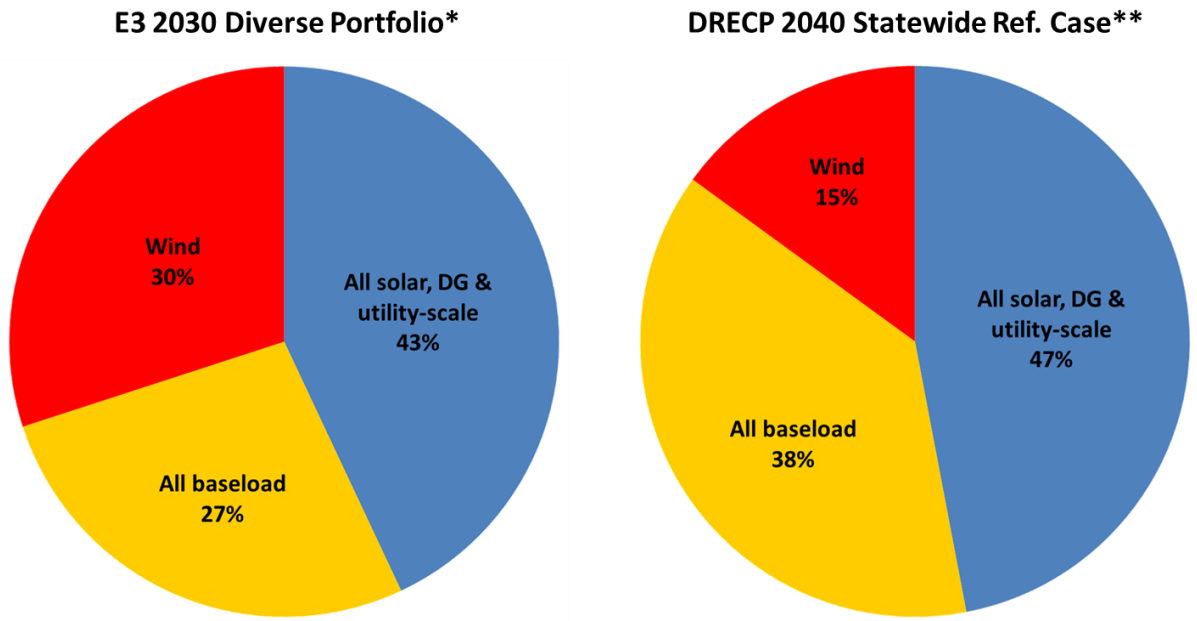
Table B. Share of the Mix: E3 Diverse Portfolio vs. DRECP Statewide Reference Case

	E3 2030 Diverse Portfolio*	DRECP 2040 Statewide Reference Case**
All solar (DG & utility-scale)	43%	47%
All baseload (geo, bio)	27%	38%
Wind	30%	15%

* Source: E3 Report (January 2014) at Table 10.

** Source: Vidaver, CEC, October 2011 Scenarios, Tables 3-5. (MW figures converted to MWh using capacity factors from July 2012 Scenarios, Table 6. CEC pre-2010 renewables generation (downloaded from http://energyalmanac.ca.gov/electricity/) added for improved comparability to E3 figures.

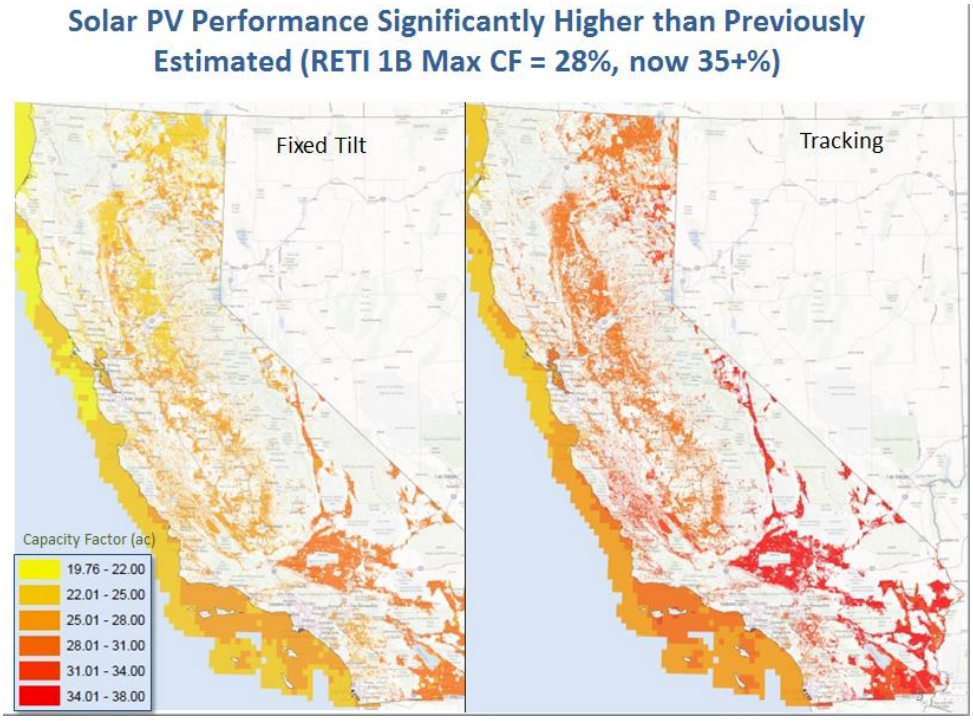
Figure B. Share of the Mix: E3 Diverse Portfolio vs. DRECP Statewide Reference Case.



* Source: E3 Investigating a Higher RPS (January 2014), Table 10.

** Source: Vidaver, CEC, October 2011 Scenarios, Tables 3-5; July 2012 Scenarios, Table 6; CEC California Electricity Statistics & Data - 2010.

Finally, the relative economics of wind and solar technologies have dramatically changed during the timeframe of the Draft Plan's development. Specifically, solar photovoltaic (PV) costs have declined by roughly 50% since 2009, while wind energy costs have declined by about 15% and solar thermal costs have not declined.[52] The implications are significant: as shown by Map Set A, below, solar resources for PV technology throughout California are now more cost-effective than PV resources in the desert were just five years ago. Moreover, economies-of-scale above 20 MW for solar PV are not appreciable and there are significant opportunities to site PV projects in urban areas on parking lots and commercial/industrial rooftops.[53] (Solar thermal resources currently appear to be uncompetitive.) This means that solar PV developers have far greater geographic flexibility to site competitive projects than do wind developers. As shown by Map Set B, below, high-quality wind resources in California are very limited and much of the best resources are located in the DRECP area. These facts directly contradict the Draft Plan's assumption that a high fraction (70%) of in-state central station solar PV capacity will be in the planning area and only 50% of wind capacity will be located in the planning area.[54]

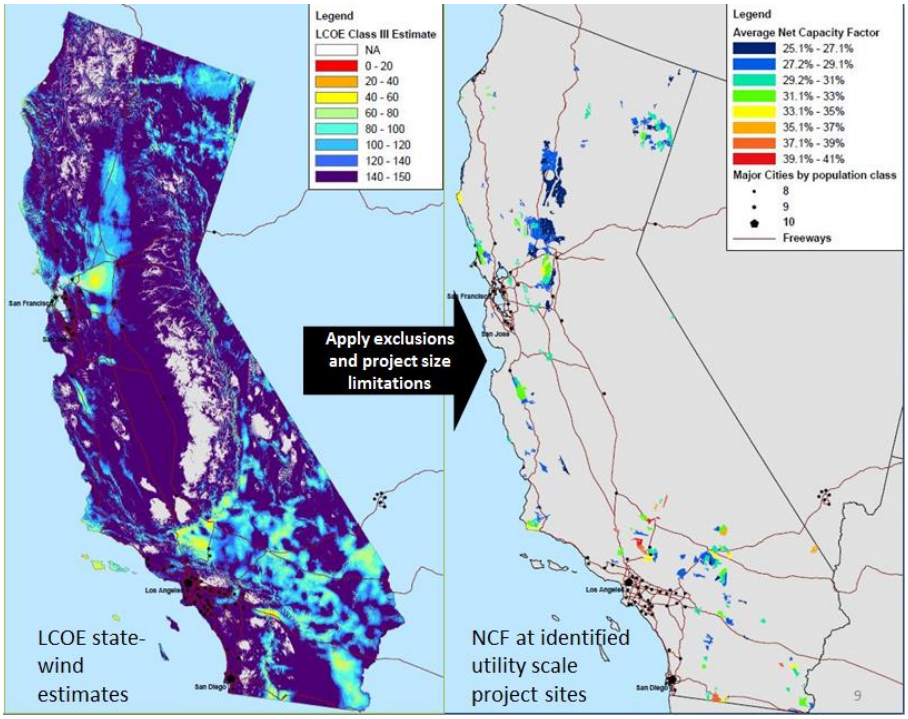


Map Set A. Source: Black & Veatch, for 2/10/15 CPUC RPS Calculator Workshop

[52] *See, e.g.,* CPUC RPS Calculator Workshop – Resource Valuation (slides presented by Black & Veatch at February 10, 2015, CPUC workshop, drawing in part on LBNL estimates. Available at: http://www.cpuc.ca.gov/PUC/energy/Renewables/).

[53] Ibid.

[54] Draft Plan, Appendix F3, p. 11.



Map Set B. Source: Black & Veatch, for 2/10/15 CPUC RPS Calculator Workshop. Notes regarding right-hand map: B&V eliminated some areas, such as military flight paths, that were not excluded in CalWEA's wind resource maps, consistent with DoD policy. Currently, wind projects require Net Capacity Factors of 30% or higher to be competitive, thus the areas shown in blue are not viable.

The types of economic, reliability and resource availability analyses discussed above were not conducted for the Draft Plan as the 2040 renewable energy portfolios were constructed, nor were these or other readily available analyses apparently considered at all. These issues were, however, raised and discussed at an Energy Panel Roundtable convened on July 13, 2012 for the DRECP.[55]

In sum, the Energy Commission's "Calculator" that underlies the Draft Plan completely fails to live up to its claim that it "**does not predict** what the future **will** be, but helps inform and prepare for a number of **different futures** that **might** be."[56] (Emphasis in original.) Likewise, by fixing the geothermal planning goal in every Alternative at levels higher than have been technically or economically proven[57] and by establishing unreasonably low wind planning goals, the Draft Plan fails to meet its "guiding principle" that the DRECP should "remain market neutral between

[55] Hand (NREL) and Mills (LBNL) *supra* note 51.

[56] Draft Plan Appendix F-3 at p.3.

[57] GEA *supra* note 17.

different technologies…"[58] Indeed, the Draft Plan states, "Geothermal and utility-scale distributed generation are developed to their full capacity as assumed by the CEC…They are not subject to the competitive effects of wind or solar."[59]

By planning for an amount of wind energy that will almost certainly prove to be far too low, the Draft Plan would cap the amount of low-cost wind energy that could very well be needed to meet the daunting challenge of meeting California's 2050 GHG-reduction goal in a manner that minimizes impacts on consumers' electricity bills. Thus, the DRECP is, without good reason, arbitrarily foreclosing California energy futures that are both reasonably foreseeable and, in fact, quite likely.

iii. <u>The Final Plan should be clarified to ensure that the planning goals are applicable to projects built after adoption of the DRECP</u>

A lack of clarity exists in the Draft Plan regarding whether or not the planning targets will include (i.e., "be used up by") the renewable energy capacity that has been built since 2010. The Draft Plan "plan[s] for the development of up to 20,000 MW of new renewable electricity generation."[60] In response to a query from CalWEA, a DRECP representative stated, "Where the draft DRECP states that it assumes that there could be a demand for up to 20,000 MW, it is referring to a demand during the term of the DRECP." "[The planning assumption] does not include the 3,000 MW of capacity built since 2011. The starting point for the 20,000 MW would be when the DRECP is approved."[61]

However, the planning figures were developed with a "starting point" of the existing, in-state renewables operating in 2010.[62] Further, various statements in the Draft Plan clearly state or suggest that the over-3,000 MW of renewables that have already been built in the DRECP area will count towards the planning figure.[63] If renewables built after 2010, but prior to the adoption

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[58] Draft Plan Volume 1, p. 1.3-37.

[59] Draft Plan Appendix F1, p. F1-15.

[60] Draft Plan, Volume 1, p. I.3-39.

[61] Chris Beale, personal email communication to Nancy Rader, January 21, 2015.

[62] Vidaver *supra* note 14, at p. 3.

[63] *See*, e.g., Draft Plan Appendix F3, p. 21. ("Q. Should the central-station renewable capacity developed in the DRECP area during the past three years be considered part of the generation capacity to be planned for through 2040 under the scenarios developed using the Acreage Calculator? Yes. In developing the scenarios, staff assumed that the 35,000 GWh of zero-carbon, energy provided by existing (as of January 1, 2011) central-station renewable resources in California would be provided in 2040 by new renewable resources at the same locations. Accordingly, *any in-state central-station renewable resources that have come on line since January 1, 2011 are in effect contributing to the incremental renewable energy need as estimated using Acreage Calculator-based scenarios."* (Emphasis added.) *Also see* Appendix F3, p. 24. ("How many MW does DRECP seek to permit? How many MW have already been built? Roughly speaking: The July 2012 scenarios … call for

of the plan, were to count towards the planning goals, it would zero-out or nearly zero-out the very limited wind energy planning goals under most of the alternatives, given the 2,269 MW[64] of wind energy that was brought on line in the DRECP area in the 2011-2013 timeframe. Therefore, clarifying this point is a critically important issue for wind energy.

d. The Draft Plan Fails to Plan Beyond 2040 Despite an Acknowledged Doubling of Renewables Anticipated by 2050.

The Draft Plan includes alternatives that estimate renewable energy needs only for 2040, and it fails to adequately anticipate the *doubling* of renewable energy that the Draft Plan itself acknowledges could be required between 2040 and 2050[65] as society transitions entirely away from fossil fuels.[66] All of the concerns that CalWEA expresses around the inadequacy of the 2040 goals become amplified in the context of the Draft Plan's failure to plan for the doubling of renewable energy that may be required by 2050.

As stated in the Draft Plan, the planning estimates for the amount of renewable energy capacity that will be needed in the desert are based in part on California's goals for GHG emission reductions by 2050.[67] Governor Schwarzenegger's 2008 Executive Order launching the DRECP effort cited the need for "substantially increased development of renewable electricity sources…to meet the greenhouse gas reduction goal of 1990 levels by 2020 and 80 percent below 1990 emissions levels by 2050, making the success and expansion of renewables a key priority for California's economic and environmental future."[68]

In support of these 2050 goals, DRECP efforts through 2011 were focused on planning for the amount of renewable energy that would be needed in the DRECP area to support achievement of the state's 2050 GHG reduction goals.[69] Energy Commission staff estimated the need for

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slightly over 17,100 MW; the DRECP seeks to accommodate the development of up to roughly 20,000 MW of renewable energy projects; Over 3,000 MW of renewables have already been built in the DRECP area."

[64] Draft Plan Appendix F3, Table on p. 23.

[65] Draft Plan at p. 1.3-39.

[66] This anticipated doubling is separate from the Draft's assumption that only 80% of electric sector GHG reductions will be needed, as discussed above.

[67] Draft Plan at p. 1.3-39.

[68] Executive Order S-14-08, November 17, 2008. Available at: http://www.drecp.org/documents/docs/2008-11-17_Exec_Order_S-14-08.pdf.

[69] See "Desert Renewable Energy Conservation Plan: Renewable Energy Acreage Calculator and the 2040 Revised Scenario's Renewable Portfolio," July 27, 2012. Footnote 3 states, "While staff presented scenarios for both 2040 and 2050 in December of 2011, staff was only asked to provide a revised scenario for 2040. Staff understands this is because the DRECP will rely primarily on California's electricity needs in 2040 for planning purposes." Available at: http://www.drecp.org/documents/docs/DRECP_Acreage_Calculator_Documentation.pdf.

renewable energy in 2040 and 2050.[70] That estimate showed that the DRECP acreage needed for renewable energy projects to meet 2050 GHG goals is *more than double* what will be needed to meet 2040 goals.[71] For example, the estimated acreage under the 2040 "Solar/Wind 60/40" case increased from 315,516 acres to 686,721 acres in 2050. As acknowledged in the Draft Plan, this doubling of need is due to dramatic electric-demand growth resulting from the electrification of the transportation and other economic sectors that would have to be met entirely from zero- or low-carbon resources.[72]

Despite the major expansion in renewable energy that is anticipated for the decade following 2040, the Draft Plan affords only one paragraph to justify its decision to scale the planning timeframe back from 2050 to 2040.[73] This paragraph states that technologies are expected to evolve in ways that "might" fundamentally change the available options for meeting renewable energy and GHG reduction targets over time, citing possible maturation of off-shore wind and tidal generation technologies that "might" reduce future need for desert-based solar and wind generation. For these reasons, and because planning for 2050 "would have required planning for dramatically more renewable energy capacity" notwithstanding uncertainties inherent in planning 30 years into the future, "the agencies agreed that 2040 was a more prudent and realistic time period for the DRECP planning effort."[74] CalWEA acknowledges that looking out to 2050 is difficult; however, the Draft Plan should have been informed by a range of reasonably possible needs for desert-based renewable energy in 2050.

As with the deficiencies in planning for the 2040 goals discussed in section 1.c.i above, by ignoring the need to account for the Draft Plan's impacts on the state's 2050 GHG goals, the EIS/EIR for the Draft Plan is legally inadequate. That the Draft Plan did not account or plan for an anticipated doubling of renewable energy between 2040 and 2050 further infects the legal adequacy of the EIR/EIS because a failure to adequately describe elements of anticipated "project operations" can also result in a flawed environmental impact analysis. *See, e.g.*, 40

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[70] Draft Plan Appendix F3 – DRECP Acreage Calculator, at p.9.

[71] Filename "20402050 Scenario description narr final 60-40 10-8-2011_1" as transmitted to the DRECP Stakeholder Committee from Scott Flint on October 10, 2011.

[72] Draft Plan at pp. 1.3-39 and -40.

[73] Draft Plan at p. 1.3-40.

[74] In Draft Plan Appendix F3 – DRECP Acreage Calculator at p.10, the Draft Plan suggests that stakeholders desired to see a 2040 planning goal. However, having attended every DRECP Stakeholder Committee meeting, CalWEA can recall no substantial stakeholder discussion of this issue; certainly, no economic or environmental analysis was every presented in an attempt to justify the decision to dramatically scale back the planning goal, and no renewable energy industry stakeholder supported this dramatic change in project scope. (Note that while there was some discussion of the issue at the May 17, 2011, DRECP Stakeholder Committee Meeting, the issue of scaling back the planning goal from 2050 to 2040 was not explicitly noted on the agenda for that meeting. See http://www.drecp.org/meetings/2011-05-17_meeting/2011-05-17-18_Agenda.pdf.)

C.F.R. § 1508.18; *San Joaquin Raptor Rescue Ctr. v. County of Merced*, 149 Cal.App.4th 645 (2007). Moreover, an environmental analysis must analyze future expansion of a project or other action if it is "a reasonably foreseeable consequence of the initial project" and the future expansion or other action "will likely change the scope or nature of the initial project and its environmental effects." *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 396 (1988); *see also* 40 C.F.R. § 1502.4 (under NEPA, "[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement."). Future activities must be treated as part of the project, and included in an environmental impact analysis if those activities are likely to result from an approval of the project. *See National Parks & Conserv. Ass'n v. County of Riverside*, 42 Cal.App.4th 1505 (1996); *Del Mar Terrace Conservancy, Inc. v. City Council*, 10 Cal.App.4th 712 (1992). The failure of the Draft Plan and the EIR/EIS to include an analysis of foreseeable renewable energy needs to meet the 2050 goals, and an analysis of the environmental impacts associated with efforts to meet those needs, is a violation of NEPA and CEQA.

As importantly, CalWEA finds no evidence that the Draft Plan includes *any* assessment of the effect that its decisions in support of a 2040 plan will have on the ability to maintain the conservation goals associated with the 2040 plan, or how it will affect the ability to achieve what will be, at the very least, a very substantial increase in the need for desert-based renewable energy development by 2050 (even if that need is trimmed by an evolution in ocean-based technologies). Indeed, the lead California Energy Commission official for the DRECP stated during a 2012 Energy Panel Discussion for the DRECP:

> [W]e keyed the calculator to keep … California on its greenhouse gas trajectory of 80 percent below 1990 levels in 2050. Through the stakeholder work, we ultimately settled on 2040 as the target date for the planning, but I want to note and emphasize for people here that the renewable energy – the need for incremental renewable energy that we calculated literally doubled between 2040 and 2050 … so that we know that a 2040 number … is probably low in context of California's long term goals, and that's one of the understandings that needs to inform our work.[75]

The uncertainty over whether the 2050 need for renewable energy will be twice the need in 2040 or something different does not relieve the DRECP agencies of the responsibility to make its best possible assessment, which could be based on a range of possible outcomes. It is insufficient to presume, as the Draft Plan does, that "there will be time to correct course between now and 2050

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[75] Statement of Commissioner Karen Douglas, California Energy Commission, Transcript of the July 13, 2012, Energy Panel Discussion for the DRECP at pp. 21-22 (Docket 09-RENEW EO-01). Available at: http://www.drecp.org/meetings/2012-07-13_workshop/2012-07-13_Transcript.pdf.

if necessary."[76] In particular, it is very likely that public lands outside of DFAs – where renewable energy development is proposed to be largely prohibited through 2040 and which may or may not be needed to support 2040 conservation planning goals – will be needed to support 2050 GHG-reduction goals.

In effect, the DRECP planners are putting off to a later date the analysis of what needs to be done between 2040 and 2050 to meet our renewable energy goals. By doing so, the DRECP planners are impermissibly deferring the analysis of these efforts and their potential environmental effects. If assessed now, the amount of wind and other renewables needed through 2050 might lead to different decisions in order to maintain maximum flexibility to accommodate potential renewable energy needs after 2040. This deferral of analysis also leads to an impermissible deferral of any mitigation that might be required to address these effects. Both the deferral of a project's environmental analysis of impacts and the deferral of mitigation designed to address those impacts violates NEPA and CEQA. *See, e.g.*, *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989); *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 307 (1988) ("By deferring environmental assessment to a future date, the conditions run counter to that policy of CEQA which requires environmental review at the earliest feasible stage in the planning process.").

CalWEA has demonstrated that it is very likely that additional lands must be made available for development to support 2040 GHG-reduction targets, let alone 2050 reduction targets, but the Draft Plan does not discuss the implications of its proposed prohibitions on renewable energy development outside of DFAs on the achievement of 2050 GHG-reduction goals. If those prohibition areas must remain prohibition areas after 2040 to achieve 2040 goals, the Draft Plan should include an assessment of the associated economic or environmental effects on California's compromised ability to achieve its 2050 GHG-reduction goals without the ability to access California's best remaining renewable energy resources.

For example, more wind turbines would be required in a lower-quality wind resource than in a higher-quality resource area to generate the same amount of electricity; and, if restricted from high-resource-quality areas of the desert, wind development would be more likely to occur in coastal or forested areas, possibly with greater environmental, visual, or cultural impacts. Further, restrictions on the state's renewable energy reserves may result in failure to achieve the state's GHG-reduction goals, or require greater reliance on nuclear energy, either of which could cause far greater impacts on wildlife and human health.[77]

All of these actions that could be required to meet the 2050 greenhouse gas reduction goals, including the possibility of additional wind turbines in coastal or forested areas, are sufficiently

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[76] Draft Plan Executive Summary at p. 16.

[77] Newman et al *supra* note 137.

foreseeable such that they should have been analyzed in the Draft Plan and the EIR/EIS. By ignoring these actions, the environmental analysis of the DRECP is essentially incomplete. For example, in the NEPA context, a lead agency must include other connected, cumulative, and similar actions in a single environmental review document. 40 C.F.R. § 1508.25(a). The Ninth Circuit Court of Appeals relied on this principle to hold that the impacts of a proposed road in a roadless area of a forest, together with any timber sales that might occur in the future in relation to the proposed road, were required to be analyzed in a single environmental review documents because they were connected and cumulative actions. *Thomas v. Peterson*, 753 F.2d 754 (9th Cir. 1985). Notably, in that case the Ninth Circuit rejected a content that "the sales are too uncertain and too far in the future for their impacts to be analyzed along with the road." *Id*. The court essentially found that if the sales were sufficiently certain to justify construction of the road, they were sufficiently certain to have their environmental impacts analyzed along with the road. The same rationale applies here – additional lands needed for wind development to meet the 2050 reduction targets is enough of a certainty to warrant inclusion in the Draft Plan and EIR/EIS. *See also Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376 (1988) (an environmental review document under CEQA must analyze future expansion of a project or other action if it is "a reasonably foreseeable consequence of the initial project"); *El Dorado Union High Sch. Dist. v. City of Placerville*, 144 Cal.App.3d 123 (1983) (increased school enrollment that would result from a residential development, leading to overcrowding and the need to construct a new school, was an effect of the project that should have been analyzed in an EIR).

2. THE DRAFT PLAN CANNOT SUPPORT THE ACHIEVEMENT EVEN OF ITS INSUFFICIENT 2040 WIND GOALS.

The Draft Plan not only plans for too little wind energy, as discussed above, but it is very unlikely to be able to support even the low amount of wind energy that it is planning for under the various alternatives. The Draft Plan has taken insufficient account of a number of factors that should go into planning for the acreage necessary to support wind energy development, including commercial activity, wind resource quality, military, environmental and technical siting conflicts, and the feasibility of developing wind projects on private land near population centers. All of these factors create a critical need to provide substantial flexibility so that developers can find projects sites where development is both commercially and politically feasible. Flexibility is necessary to provide for technological change and knowledge gains that should feed into adaptive management. The Draft Plan fails to provide this flexibility in large part due to a proposed across-the-board prohibition of wind energy development across wide swaths of public land.

These comments focus on the Preferred Alternative, with its 3,070 MW wind planning goal, and Alternative 2, which contains the highest wind planning goal of 5,810 MW.

a. The Proposed DFAs Provide Insufficient Acreage to Achieve the Identified Planning Figures.

By the Draft Plan's own estimation, only 30% of the acreage of the Development Focus Areas under the Preferred Alternative would be feasible for wind development.[78] The Draft Plan employed a complex, abstract and opaque methodology in an attempt to recognize that "not every parcel of land can be developed, nor would every acre of a developable parcel be suitable for development."[79] The methodology was apparently used as the basis for applying "rule of thumb" "siting discount factors" under which the actual project acreage needed to meet the planning figure was multiplied by three to five times to estimate the acreage required in specific areas to successfully site generation.[80] This methodology (apparently developed in 2011 and 2012) was never discussed with DRECP stakeholders, nor, to CalWEA's knowledge, did DRECP planners ever discuss with project developers the methodology's relevance to the actual experience of developing projects and to commercial and political realities.

CalWEA's assessment, based upon its membership's collective decades of experience in siting wind projects in California, particularly in the desert, is that the Draft Plan's DFAs are very unlikely to enable achievement of the Draft Plan's wind planning figures. The DFAs in the Preferred Alternative capture just 11% of the DRECP area's best available wind resources,[81] and only 12% of the wind resource areas of sufficient quality to be commercially feasible today.[82,83] See **Map C**. Under Alternative 2, the figures are 19% and 18%, respectively. In July 2013, CalWEA shared with DRECP agency officials its assessment of the acreage for wind energy development that will be required to support planning goals based on the experience of its member companies.[84] CalWEA recommended the use of a siting discount factor of over 9,[85]

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[78] Draft Plan Table II.3-19a at p. II.3-165 and -166 and Appendix F1.

[79] This methodology is described in Draft Plan Appendix F1.

[80] Draft Plan Volume I, p. I.3-52.

[81] CalWEA Priority Wind Resource Area (PWRA) Tiers 1-3. See description of CalWEA's PWRA in section 3.1.

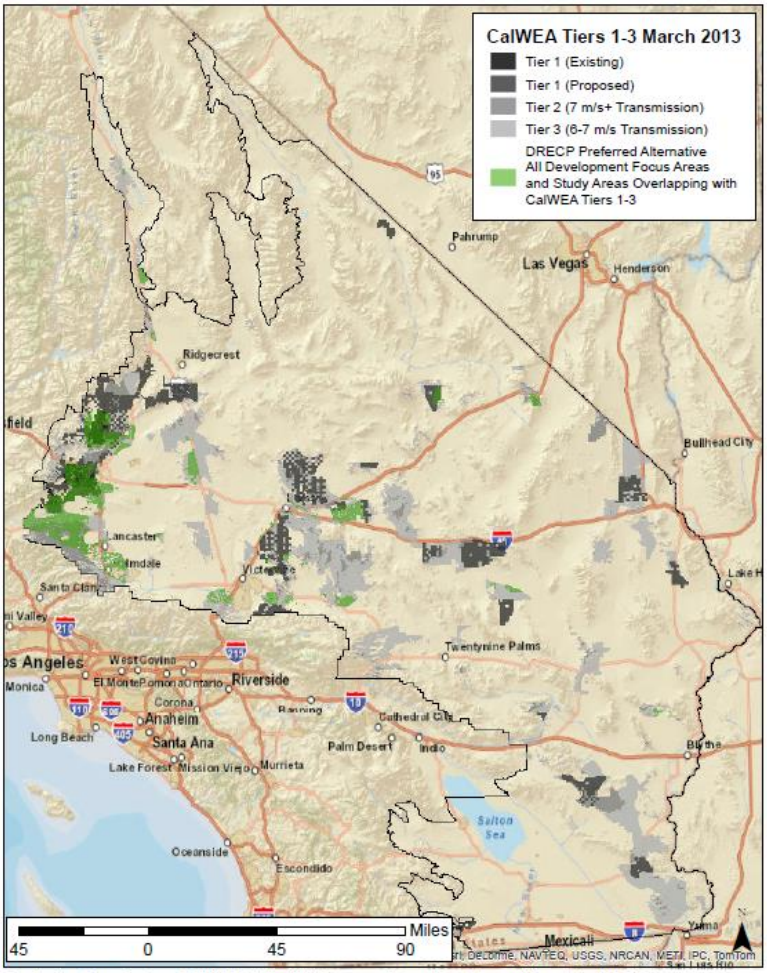
[82] CalWEA PWRA Tiers 1P and 2. PWRA Tier 3 contains wind resources of 6-7 m/s, which cannot support commercially viable wind projects in today's market. Energy production is proportional to the cube of the wind speed, thus sites with low wind speeds generate significantly less output than areas with even a modest increase in wind speeds. Market conditions (i.e., power prices in wind contracts) would have to increase to justify the increased cost of building in less efficient areas.

[83] See Exhibit 1 for acreage figures.

[84] CalWEA, "Ideas for Future Assessment Areas on Public Land: Presentation to the DRECP Agencies" (July 10, 2013).

[85] A siting factor of 9 can be derived from two factors that CalWEA used to estimate needed acreage, based on developer experience: (1) about five investigated sites are abandoned for every one that is developed; and (2) about 63 acres/MW will be needed to respond to conflicts within a site that ultimately inhabits 40 acres/MW. A specific case example was presented to the DRECP. See Rick Miller, enXco (now EDF-Renewable Energy), …

which presumes, as a starting-point, that the acreage is in areas of high wind quality. This discount factor reflects the fact that the DRECP will not resolve the most significant potential siting conflicts for wind energy, including military-related conflicts, golden-eagle-related conflicts, and community conflicts. It is not unusual for as little as 10% of a land area that is initially identified as suitable for a wind project ultimately to be developable. There are many other cases where the conflicts become insurmountable and the development must be abandoned altogether.



Overlapping Areas Between CalWEA Priority Wind Resource Areas (Tiers 1 through 3) and Draft DRECP Preferred Alternative All Development Focus Areas and Study Areas - October 27th, 2014

Map C. The DFAs in the Preferred Alternative capture just 11% of the DRECP area's best available wind resources, and only 12% of the wind resource areas of sufficient quality to be are commercially feasible today. Some of these DFA areas are already occupied by operational wind projects.

[FN 85 Cont'd] "Wind Siting Considerations & Project Development" (presentation to the DRECP Stakeholders' Committee). November 2011. These factors are reflective of the various conflicts described below.

CalWEA has calculated that achieving wind capacity planning targets will require approximately 9.5 times the acreage of the expected wind project areas ("siting discount factor"). As shown in Table C, using CalWEA's siting discount factor and drawing only from areas with high wind quality, the Preferred Alternative and Alternative 2 provide only about one-third of the acreage that is likely to be needed to reach their planning figures.[86] Thus, while Alternative 2 shows a much higher planning figure than the Preferred Alternative, it almost certainly will not come close to achievement of that planning figure.

Table C. DFAs Provide Insufficient Acreage to Achieve Planning Figures.

DRECP Alternative	Wind Planning Figure (MW)	Acres Needed to Achieve Planning Target*	Overlap of CalWEA Tiers 1-3 with DFA Acreage in Alternatives**	% of Needed Acreage Provided by DFAs
Preferred	3,070	1,160,460	384,977	33%
Alternative 2	5,810	2,196,180	643,119	29%

* Based on CalWEA Poll of Wind Development Companies' Experience (63 acres /MW needed to respond to conflicts within a project site; 5:1 project failure rate, producing an overall multiplier of 9.45).

** CalWEA GIS Assessment. See CalWEA Exhibit 1.

The various siting conflicts in the DRECP area that support the need for a high siting discount factor are discussed below. We respond also to the Draft Plan's inadequate handling of these issues.

b. In Creating the DFAs, the Draft Plan has Not Properly Accounted for Wind Resource Quality, Siting Conflicts and the Need for Siting Flexibility.

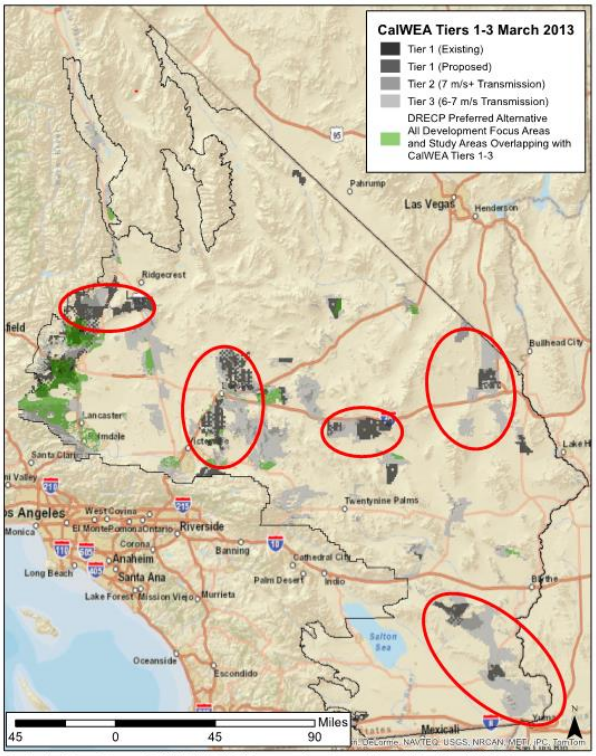
In a planning process that covers over 22 million acres and extends 25 years into the future, it is not possible to understand and evaluate all of the numerous factors, many on a site-specific basis, that will determine whether, and to what extent, a wind energy project can be built at a particular site. To ensure that planning goals can be met, therefore, it is necessary to preserve for possible development as much as possible of the land that could potentially host commercially successful wind projects to provide the needed flexibility. The Draft Plan's use of siting discount factors generally ranging from 3-5, and its consideration of the factors that could limit wind development, are inadequate for providing sufficient flexibility, as discussed below.

[86] These figures are generous, as they include wind resources of 6-7 m/s (CalWEA's Tier 3), which (as noted above) cannot support commercially viable wind projects in today's market.

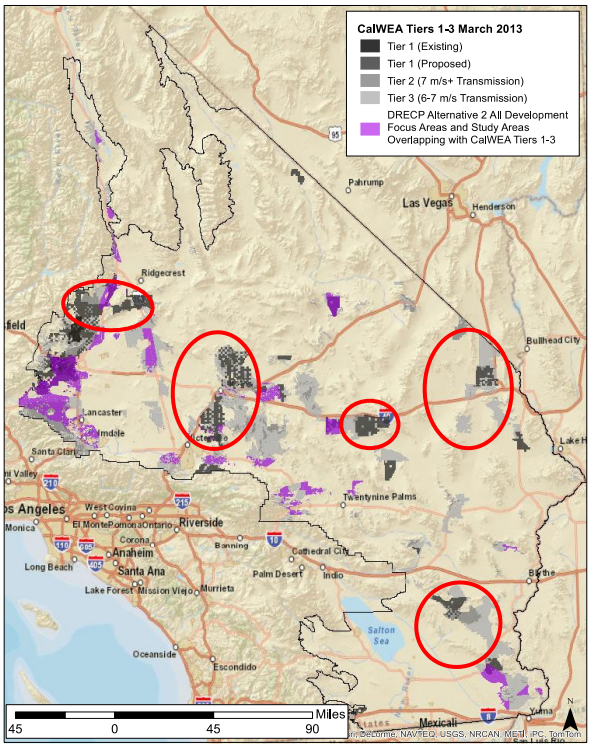
i. Consideration of commercial activity

If the Draft Plan were serious about identifying areas more likely to support project development, it would have taken into account commercial activity as the best available indication of the viability of project sites, and included at least a substantial fraction of the areas that have recently been the target of commercial exploration.[87] However, under both the Preferred Alternative and Alternative 2, most recently active development areas are excluded from proposed DFAs and study areas. See Maps D and E.

These are the only areas where actual, site-specific evaluations of potential commercial viability and potential conflicts have occurred, representing hundreds of thousands, and, in some cases, millions of dollars of investment at each site. A case study is described in Exhibit 2. While these projects may be in early stages of development, they have undergone screening processes that included at least some assessment of most of the factors described below.



Overlapping Areas Between CalWEA Priority Wind Resource Areas (Tiers 1 through 3) and Draft DRECP Preferred Alternative All Development Focus Areas and Study Areas - October 27th, 2014



Overlapping Areas Between CalWEA Priority Wind Resource Areas (Tiers 1 through 3) and Draft DRECP Alternative 2 All Development Focus Areas and Study Areas - October 27th, 2014

Maps D and E. Most areas with recent commercial wind project activity are not included in the DFAs under the Preferred Alternative (left) and Alternative 2 (right).

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87 Unfortunately, many sites on BLM land have been abandoned or delayed as interim DRECP drafts have discouraged investment in these areas, and as BLM's processing of applications has been very slow.

ii. Consideration of wind resource quality

As CalWEA explained several times during the DRECP process,[88] stronger winds are always better, particularly because the power in the wind is a *cubic* function of the wind speed. For example, if the wind speed doubles, energy output will increase by a factor of eight. Even as wind technology improves, more energy can always be extracted from a windier site. Therefore, land areas hosting higher wind speeds are always more desirable.

In identifying land for its very limited wind energy planning goals, and given the low siting discount factors used, the Draft Plan should have taken care either to include in DFAs areas with the highest-quality wind resources, or enable non-streamlined development in the highest-quality wind resource areas outside of DFAs (rather than prohibit development as discussed below). CalWEA has consistently depicted these areas in the GIS maps that it provided to the REAT Agencies.[89] However, the Draft Plan appears not to have distinguished at all between wind speeds of 6 m/s and 7 m/s and higher; in today's market wind projects are competitive only with wind speeds of 7 m/s and higher.[90]

Further, in failing to consider areas of greater and lesser resource quality, the Draft Plan erred in using an acreage yield factor of 40 acres/MW,[91] as this figure reflects the acreage needed for commercial projects that benefit from superior wind resources. Projects sited in lower-quality resource areas will require more turbines (and thus more disturbance area) to produce the same amount of energy. For example, a 100-MW project consisting of 50 2-MW wind turbines sited in an area with a 35% Net Capacity Factor (NCF) can generate just over 300,000 MWh per year. If the project is moved to an area with a 28% NCF, 62 wind turbines would need to be installed in order to generate the same amount of electricity, increasing the number of turbines and associated disturbance by approximately 25%. Thus, in estimating the distribution of renewable energy development to estimate environmental impacts, the Draft Plan erred in not identifying

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[88] *See, e.g.,* "Planning for Wind Energy in the DRECP: CalWEA's Proposed Concepts, Presentation to DRECP Stakeholders, November 28, 2011; "Proposed DRECP Scenario for Wind Energy Resources," California Wind Energy Association, April 17, 2012, p.17-18; and CalWEA, "Ideas for Future Assessment Areas on Public Land: Presentation to the DRECP Agencies," July 10, 2013.

[89] *Ibid*.

[90] Draft Plan Volume 1 at p. I.3-54-55. The Draft Plan states on p. 55 that it considered the wind resource areas identified by CalWEA in 2012 (which included areas with wind speeds of 6 m/s and higher). However, the 2012 CalWEA proposal was aimed at a wind planning target of 25,000 MW for 2050 and thus was therefore accordingly expansive in the areas identified. Further, CalWEA explained that wind resource maps are based on models for area blocks, rather than meteorological measurements at specific points, and thus are not always precise. It is not uncommon to find differences of 1 to 2 meters/second between the estimates of wind speed on a general map and actual measurements by instruments at specific locations on met towers. CalWEA thus included marginal wind speed areas in its proposals to enable site-specific analysis.

[91] Draft Plan Volume 1 at Table I.3-4, p. I.3-51.

resource quality as a factor – indeed, as a *constraining* factor – in determining where wind projects will need to be developed in order to achieve planning goals. Areas hosting wind resources of less than 7 m/s are not competitive in today's market, given current prices for solar photovoltaic technologies.

Consideration of wind resource quality is an elementary step in any analysis of wind energy potential, let alone one with as much consequence as the DRECP. And yet the REAT Agencies appear to have paid far too little attention to this critical piece of information in their analyses. This single factor renders many of the planning and acreage assumptions for developing wind power in the DRECP arbitrary and wholly unreliable.

iii. Consideration of military conflicts

Southern California, and the DRECP area in particular, is home to several military bases around which intensive training and testing activities occur. These activities, including military radar testing and flight training, pose significant potential conflicts with wind energy projects across wide swaths of the DRECP area that, in many cases, will prove challenging, if not impossible, to mitigate. At the same time, compatibility with proposed projects cannot be determined from general military interference maps, and areas shown to be incompatible may become acceptable for wind development after further study based on project design and mitigation measures.[92] Compatibility is determined after site-specific review of projects by the Department of Defense (DoD) Siting Clearinghouse via Section 358 as well as the FAA Obstruction Evaluation/Airport Airspace Analysis.

Given the process for site-specific review of proposed wind projects, it is not appropriate to eliminate areas for potential development in the DRECP area based on potential military conflict. It is important, however, to recognize that military conflicts will, in fact, prevent wind project development in many high-risk areas, thus supporting the need to provide more total area for wind project development, i.e., a larger siting discount factor.

Appropriately, areas with potential military conflicts were not eliminated from the DFAs in the Preferred Alternative and Alternative 2. Nevertheless, CalWEA's analysis shows a high degree of potential military conflict with the proposed DFAs.[93] As shown in Table D below, 23% and

[92] See, e.g., CalWEA Exhibit 2, Golden Sun Case Example.

[93] CalWEA calculated overlap of DFAs using a compilation of DoD "red" areas including "red" areas delineated in GIS data available on DataBasin and areas within the High Risk of Adverse Impact Zone, HRAIZ (CalWEA approximated the area based on a presentation given by Department of Defense representatives at the DRECP Stakeholder Meeting, July 25 and 26, 2013). It is perplexing that the HRAIZ was described throughout the DRECP planning process, but is not discussed or addressed in the description of the Preferred Alternative or appendices, including the DoD-specific appendices. Though DoD representatives presented and discussed HRAIZ in DRECP meetings, stakeholders were not provided with maps or data specifically delineating this…

32% of the Preferred Alternative and Alternative 2, respectively, fall within potential conflict areas. [These areas are comprised of CalWEA's approximation of the DoD's "High Risk of Adverse Impact Zone," areas of high likelihood of unacceptable risk to national security ("red" areas), and areas of "concern" resulting from a Section 358 review of CalWEA's Tiers 1-3, within which siting wind projects is expected to be particularly difficult.] Map F below depicts these conflict areas under the Preferred Alternative. A total of 65% and 70% of the Preferred Alternative and Alternative 2, respectively, fall within HRAIZ , "red" areas, Section 358 areas of concern, or "yellow" areas with low likelihood of unacceptable risk to national security (MTRs and SUAs). These potential conflicts clearly demonstrate the need for the DRECP to provide more areas in which developers can seek to find projects compatible with military operations.

Table D. Overlap of Potential Military Conflict Areas with DRECP DFAs

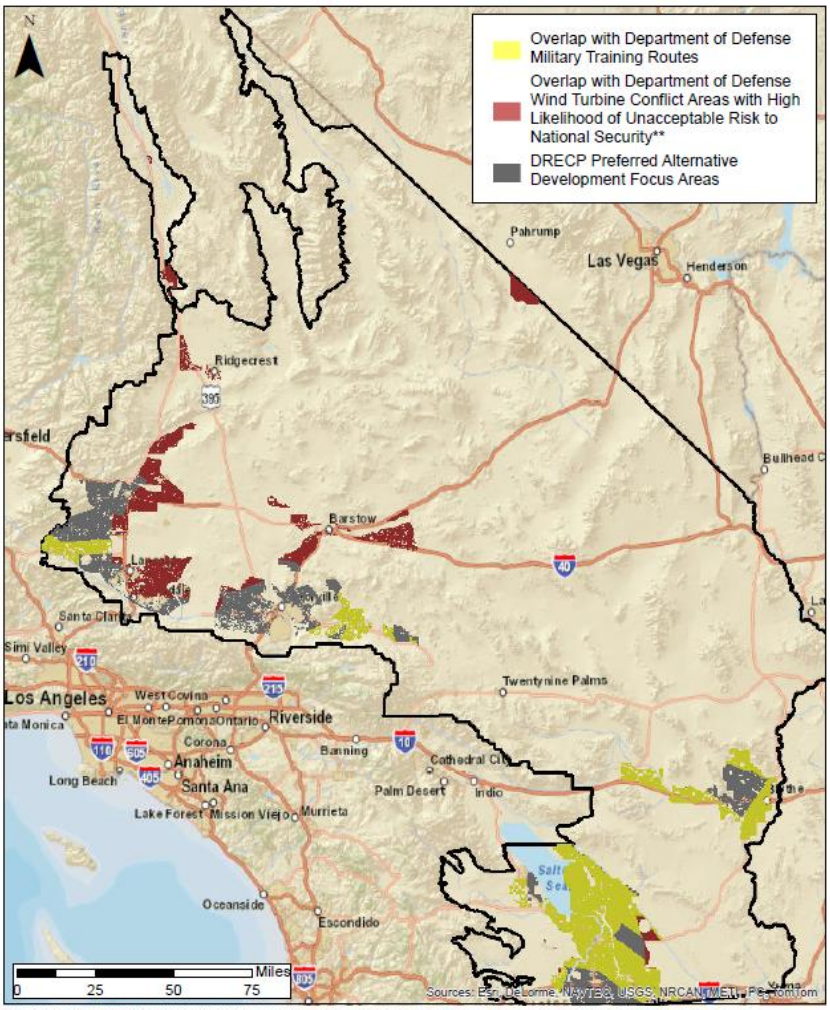
DRECP Alternative	Acreage	Overlap w DoD Red + HRAIZ + Sec 358 Concern	Percent of Alternative	Overlap w DoD Red + HRAIZ + Sec 358 + Yellow Concern	% Overlap w DoD Red + HRAIZ + Sec 358 + Yellow Concern
Preferred Alternative	2,023,995	472,801	23%	1,324,826	65%
Alternative 2	2,472,808	793,912	32%	1,721,384	70%

iv. Setback requirements and other development factors

Other factors that will reduce the feasibility of lands in high-quality wind resource areas include the ability (or lack thereof) to lease land rights, including rights to land providing transmission access; the suitability (or lack thereof) of geotechnical conditions for construction; and numerous exclusion areas or setback requirements. Setback requirements address various issues such as avian concerns, terrestrial environmental concerns, cultural resources, transmission lines, aqueducts, residences, streams, and other features of the land.

[FN 93 cont'd] critical zone. However, it appears as though this area is delineated in Appendix J1, though it is not referred to as HRAIZ. This lack of clarity created a challenging environment for properly analyzing potential conflict areas.

For example, the Draft Plan would require projects to stay 0.25 miles from riparian resources[94] to the maximum extent practicable, with exceptions being limited to "unavoidable impacts" defined as "minor intrusions to biological resources, such as a necessary road or pipeline extension across a sensitive resource required to serve a project." This riparian setback requirement can be difficult to achieve in practice, "given that state-jurisdictional ephemeral streams pervade the California deserts like capillaries under skin."[95]



Overlap of DRECP Preferred Alternative Development Focus Areas and Department of Defense Military Conflict Areas - February 2015

***Wind Turbine Conflict Areas overlay includes Areas with High Likelihood of Unacceptable Risk to National Security (as provided on DataBasin), an approximation of the High Risk of Adverse Impact Zone (HRAIZ), and results of a CalWEA Section 358 review.*

Map F. Overlap of Potential Military Conflict Areas with DRECP DFAs (Preferred Alternative).

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94 Draft Plan Volume II at p.3-48.

95 Bell, Andrew C. and Zachary A. Kearns, *Marten Law, "*California's Controversial New Renewable Energy Conservation Plan Restricts Solar, Wind Development," December 15, 2014.

The Draft Plan would also require that projects not be sited or constructed within one mile of active or alternate golden eagle nests within an active golden eagle territory in an attempt to avoid and minimize wind-project impacts to eagles.[96] Based on the Draft Plan's definition of alternate nest as one which has been occupied or worked on by adult eagles in the last seven years, most, if not all, known golden eagle nests near DFAs will require a 1-mile setback. The Draft Plan does not appear to have taken this requirement into account in its siting discount factor, yet developer surveys may reveal the presence of eagle nests in or proximate to DFAs.[97]

All of these factors support the use of a high siting discount factor as set forth by CalWEA based upon the collective expertise of wind siting professionals and the need to provide substantial siting flexibility in order to achieve wind planning goals.

c. The Draft Plan's Private-land DFAs are Illusory.

Under the Preferred Alternative, DFAs on private land account for 78% of total DFA acreage; under Alternative 2, the figure is 67%. Thus, the Plan largely hinges on the ability to develop substantial wind energy capacity on private lands to achieve its wind planning targets. To date, however, the counties have shown little inclination in their DRECP-related planning efforts, or otherwise, to host utility-scale wind projects in their jurisdictional areas, as discussed in two cases, below. The Draft Plan fails to properly account for local land use policies and practices, many of which reflect positions contrary to the development of utility-scale renewable energy projects; therefore, the Draft Plan's reliance on substantial private land development within the DFAs is misplaced. Such a fundamental failure in the analysis significantly undermines its conclusions with respect to the contributions that can be made to energy development on these lands and further reflects the arbitrariness of the Draft's overall analyses and conclusions. *See, e.g.*, 5 U.S.C. § 706(2)(A) (reviewing court shall set aside as unlawful agency actions found to be arbitrary or capricious).

i. Los Angeles County

In the case of Los Angeles County, the Draft Plan's Preferred Alternative assumes that its wind planning goal is "distributed fairly evenly with most in the WMES [West Mojave and Eastern Slopes] ecoregion"[98] in Los Angeles County almost entirely on private lands. Of the 3,070-MW planning goal, 29% (889 MW) is assumed to occur this area. Under Alternative 2, the figure is

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[96] This requirement is not supported by evidence; see CalWEA Exhibit 3.

[97] For example, surveys performed in 2011-12 for TerraGen Power in the Tehachapi area found at least two active golden eagle territories that were not identified in the BLM's historical nest data dating to the 1970s. Source: Personal communication, Kevin Martin, TerraGen Power (February 1, 2015).

[98] Draft Plan Chapter IV at Table IV.1-1, p.IV.1-12.

17% (988 MW out of the 5,810-MW planning goal).[99] While the Draft Plan acknowledges that LA County actions "have generally been to deny wind development within the Plan Area," it nevertheless considers "the likelihood of policy changes … as a *possibility* over the lifetime of the DRECP."[100] (Emphasis added.) CalWEA does not share the REAT Agencies' optimism that LA county policies will change to enable on the order of 1,000 MW of wind development. The Draft Plan's impact analysis appears to ignore wind development in LA County completely, as it simply states that "the majority of development in Los Angeles County would consist of solar energy generation and transmission lines."[101]

Indeed, LA County's most recently adopted Area Plan policies and recent actions denying even the investigation of the feasibility of wind energy facilities demonstrate that the County's on-the-ground reality is anti-wind and anti-utility scale renewable energy. In November 2014, the LA County Board of Supervisors unanimously voted to adopt an update to the Antelope Valley Area Plan – the plan area in which the DFAs in LA County would be located. The Area Plan is explicit in its preference to avoid allowing utility-scale renewable energy. For example, Policy COS 11.1 "[p]romote[s] energy retrofits of existing public facilities throughout the County to complement and *reduce dependence upon utility-scale renewable energy production facilities*." (Emphasis added.) Policy COS 12.1 "[p]romote[s] the use of individual renewable energy systems throughout the County to complement and *reduce dependence upon utility-scale renewable energy facilities*." (Emphasis added.) And Policy COS 12.2 "[r]equire[s] appropriate development standards for individual renewable energy systems to minimize potential impacts to surrounding properties. *Simplify the permitting process for individual renewable energy systems* that meet these development standards." (Emphasis added.)

Other Area Plan goals and policies are less explicit in their anti-utility scale renewables bias, but make locating and permitting utility-scale renewable energy facilities and transmission a near impossibility. For example, Goal COS 13 and accompanying policies COS 13.1 through 13.8 "promote" siting renewable energy away from natural resources, established communities, and military facilities, and Goal COS 14, and accompanying policies 14.2, 14.4, and 14.5 require that new transmission lines be co-located with existing lines or located along existing corridors and discourage new transmission lines near natural resources and existing communities. While the Antelope Valley area is a rural area, it is populated with existing communities and significant natural resources. By prohibiting the placement of renewable energy and new transmission near either people or biota, LA County is effectively discouraging the placement of renewable energy throughout the Plan Area.

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[99] Draft Plan Appendix F2 at pp. F2-5 and F2-7.

[100] Draft Plan Appendix F1 at pp. F1-3 and F1-4.

[101] Draft Plan at IV.11-37 and elsewhere.

Even before these policies were formally adopted, the sentiment was already effectively in play, and the County was actively discouraging utility-scale renewable energy development. In 2011, both NextEra Energy and Element Power sought permits to construct and operate meteorological towers on properties in Antelope Valley (and within areas that are proposed to be designated as DFAs) to investigate the feasibility of the Blue Sky Wind Energy and Wildflower Green Energy projects, respectively. The permits sought would not have allowed full-blown development of utility-scale renewable energy, only the installation of meteorological towers to determine whether the projects would be feasible in the locations proposed. The local communities came out in strong opposition even before formal applications were submitted to the County. In the face of this entrenched and vocal opposition, and with the County firmly committed to rejecting renewable energy projects, these projects had virtually no chance from the very beginning. The Antelope Valley Area Plan merely formalizes the de facto reality for utility-scale renewable energy in the area – it will not be permitted by the County.

The Draft Plan largely ignores this reality, and in doing so, overstates the potential for renewable energy, and specifically wind energy, to be sited in the LA County DFA areas. In a few short paragraphs, the Draft Plan documents the existence of the LA County General and Antelope Valley Area Plan, and recognizes that, under those plans, applications for renewable energy facilities "must be consistent with the relevant goals and policies of the Area Plan…",[102] but the Draft Plan fails to note that the goals and policies of the Area Plan are so discouraging to utility-scale renewable energy as to be prohibitive. And while the Draft Plan states the "possibility" of policy change "over the lifetime of the DRECP,"[103] it provides no indication or evidence that such a policy change is likely over any timeframe. Given rapid population growth in the Antelope Valley area,[104] it is not reasonable to assume that local attitudes towards wind power development will improve. This type of unsubstantiated speculation is an insufficient basis to assume that DFAs will be established in this area and that development on the order of the Draft Plan's assumed capacity targets will occur.

ii. San Bernardino County

San Bernardino County is a critical component of the DRECP, comprising over half of the land area and containing an abundance of high quality wind resources. To date, however, no utility-scale wind projects have been approved by the County. In fact, the April 2013 Renewable Energy and Conservation Planning Grant application submitted by (and subsequently awarded to) San Bernardino County acknowledged that the permit-processing time for the one then-active wind project application on private land in the county was nearing over 5 years. Though the

[102] Draft Plan at pp. III-11 through -21.

[103] Draft Plan Appendix F1 at pp. F1-3 and -4.

[104] Antelope Valley communities have experienced rapid population growth over the last several years and that growth is expected to continue over the next two decades.

County stated that it has never disapproved renewable energy projects, it is unclear what would cause such a delay in permitting wind energy development when the county had approved 15 solar projects as of the submission of its grant application.

In recognition of the importance of San Bernardino County to the DRECP's wind energy goals, CalWEA has been actively engaged in the county's public participation process related to the DRECP and the San Bernardino County Partnership for Renewable Energy and Conservation ("SPARC"). CalWEA was named as an industry liaison in the grant proposal, and hoped to provide expertise to help inform the SPARC and the county's position on wind energy development. CalWEA was disappointed to find out last year that the liaison group would no longer be a part of the SPARC process.

It is clear from a recent county position paper[105] that the county has major concerns about, and has identified several flaws with, the Draft Plan, such that the County has requested recirculation of the Draft Plan. The County seeks to see both utility-scale renewable energy development and conservation directed to federal lands, as the Draft Plan proposes that over 83% of recently identified prime development land in the county be designated as DFAs or Conservation Planning Areas (CPAs). The County is concerned about the lack of offset for the loss of tax base for conversion of private lands to federal (whether for renewable energy development or conservation), noting that solar development in the county has not provided the long-term tax or job benefits anticipated. Wind projects pay property taxes on 100% of the capital investment, providing a rationale for allowing wind development in the county, although the county has not acknowledged this.

As with Los Angeles County, San Bernardino County's clear desire to avoid use of its private land areas for renewable energy development (or conservation), and its call to focus on federal lands for this purpose, calls into serious question the Draft Plan's assumption that private lands will account for on the order of 70% of total DFA acreage.

iii. Inyo County

Inyo County recently closed the public comment period for a Draft Environmental Impact Report for the Renewable Energy General Plan Amendment.[106] The Executive Summary lists under the project description, "The County is proposing to update its General Plan to include policies for

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[105] County of San Bernardino Position Paper on the Draft Desert Renewable Energy Conservation Plan, February 3, 2015. Available at: http://cob-sire.sbcounty.gov/sirepub/view.aspx?cabinet=published_meetings&fileid=1900453.

[106] *See* http://www.inyoplanning.org/projects/REGPA.htm and http://www.inyoplanning.org/projects/documents/DRAFTProgramEnvironmentalImpactReport-InyoCountyRenewableEnergyGeneralPlanAmendment.pdf.

solar energy development within the County." Through the Renewable Energy General Plan Amendment process, the County identified eight Solar Energy Development Areas. Wind energy development is not evaluated in the EIR.

d. Proposed Permanent BLM Renewable Energy Prohibitions are Arbitrary

Under the Preferred Alternative of the Draft Plan, there would be nearly 3 million fewer acres available for development than are available today.[107] The Draft Plan would prohibit all renewable energy development within the BLM's Land Use Plan Amendment (LUPA) conservation designations (ACECs, Wildlife Allocation areas, and newly designated National Conservation Lands).[108] The result would be to permanently eliminate 77% of the most commercially promising wind resources in the DRECP area, and 80% of such areas on BLM land, under the Preferred Alternative.[109] This prohibition largely confines development to DFAs, thereby dramatically reducing the ability of developers to identify areas that meet all of the many requisite conditions for a commercially feasible wind project, and thus dramatically reduces the likelihood of achieving the Draft Plan's wind planning figure. Moreover, in the face of the daunting challenge of fully decarbonizing the electricity sector, it is pure folly for the BLM to propose taking off the table for potential development most of California's remaining high-quality wind resources.

Presently, wind energy is not categorically precluded from developing in these areas. In ACECs, development must be consistent with the management prescriptions for each individual ACEC area, and any site-specific resource conflicts and impacts must be mitigated. In addition, most ACECs contain a total disturbance cap limiting the total surface disturbance from all types of development. Even very low disturbance caps, such as 1% of a total ACEC area, however, enable hundreds of thousands of acres of disturbance – more than enough to accommodate significant wind development, given the very limited ground-disturbance impact of wind energy projects.[110,111] Non-ACEC lands being added to the National Landscape Conservation System contain no specific management prescriptions or disturbance caps.

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[107] Draft Plan at Table IV.14-11. CalWEA could not locate an equivalent figure in the Draft Plan for Alternative 2.

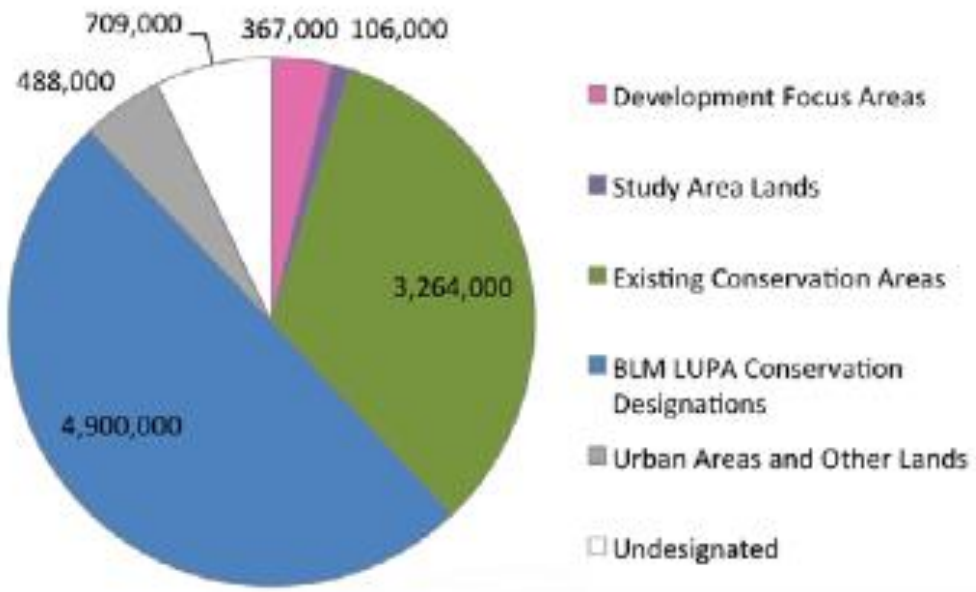
[108] *See Infra* notes 144 and 145 and Draft Plan at p. II.3-15.

[109] In conducting the GIS analysis to develop these figures, filtering was used to remove parcels tagged with BLM designations that are not owned by BLM. As an example, this filter reduced the area of Proposed Wildlife Allocations to 10% of figure reported in DRECP Executive summary.

[110] Typically, 40 acres per MW (0.025 MW/acre) must be leased in order to preserve the wind resource supplying a project's wind turbines, and generally only 2%-5% of that area is physically disturbed. See, e.g., *20% Wind by 2030; Increasing Wind Energy's Contribution to U.S. Electric* Supply, U.S. DOE (May 2008) at p. 110 (available at http://www.20percentwind.org/20percent_wind_energy_report_05-11-08_wk.pdf).

[111] The Draft Plan would significantly lower the disturbance caps in many ACECs. Thus, even if the renewable energy prohibition were lifted, additional restrictions exist.

Figure C. BLM LUPA Acres in the Preferred Alternative



Draft Plan Exhibit 6. CalWEA proposed that approximately 2 million acres of BLM land with high-quality wind resources be made available for prospecting. Under the Draft Plan's Preferred Alternative, less than 0.5 million acres are provided as DFAs, and much of that area does not contain good wind resources. Further, the Draft Plan would prohibit wind energy development in all BLM LUPA Conservation Designations, which is not the case today.

However, the rationale for the Draft Plan's categorical exclusion of wind energy development (and other renewables) from these areas does not appear to be based on any assessment of the terrestrial disturbance impacts of wind energy. Rather, as explained by a BLM spokesperson, there appear to have been two separate (and conflicting) rationales for prohibiting wind energy development in the indicated areas:

(1) "[there is] more than adequate acreage in the DFAs on BLM and non-BLM [land] in order to reach our planning goals without opening up lands that are needed for conservation"; and

(2) "we needed the flexibility for other activities to take the disturbance cap … in order to meet our mandate in FLPMA."[112]

[112] **2014-12-17_DRECP_webinar - WebEx Recording at 2:18:37** [Chris Beale:] "What analysis went into the proposed prohibition of renewable energy in the ACECs, particularly given the large tracts of land involved." [Vicki Campbell:] "So the answer is, BLM went through an extensive process of determining proposed National Conservation Lands, ACECs and SRMAs, and the values and uses associated with each of those allocations.

These rationales fail to support the prohibition of wind energy in the indicated areas for several reasons. First, as explained in detail in our comments above, the Draft Plan's wind planning goals are far too low, and the Draft Plan has not provided "more than adequate acreage" in the DFAs even to reach Draft Plan's low wind planning goals. Indeed, the acreage is totally inadequate to provide any assurance that the current planning figures can be met, let alone the much higher planning figures that ought to have been established.

Second, the presumption that wind development must be prohibited across vast areas in order to provide "flexibility for other activities to take the disturbance cap" assumes that wind development would use up a significant portion of the disturbance caps. This reasoning is flawed for several reasons:

(1) high-quality wind resources are present on only a fraction of the prohibited areas;

(2) providing siting flexibility does not mean that more total land will be disturbed; if flexibility to site wind projects outside of DFAs is provided, it will reduce the amount of development occurring inside DFAs, assuming that the total amount of wind development under the DRECP is capped;[113]

Given the fact that we are proposing Development Focus Areas where renewable energy will be prioritized, we felt that in the National Conservation Lands, ACECs, wildlife allocations, and SRMA – basically those conservation areas on BLM land – we needed the flexibility for other activities to take the disturbance cap. So, there is a disturbance cap on these areas and values which have to be maintained, and if we prioritize renewable energy projects in Development Focus Areas, and also prioritize them in other allocations, it's going to use up the land base for other activities. And so we felt that, in order to meet our mandate in FLPMA, that we needed basically room, or land base, in order to accommodate other types of projects, given that BLM is proposing almost 400,000 acres where renewable energy will be prioritized."
2014-12-17_DRECP_webinar - WebEx Recording at 2:23:50: [Chris Beale:] "Next, Julie Garvin asks: Can the DRECP meet its RE development goals given that large tracts of BLM land would be prohibited to RE development." [Vicki Campbell:] "Yes, and the reason why is that, if anyone participated in any of the public meetings – the introductory webinar and the webinar on Monday, we had a great deal of information about the, if we were just looking at the Preferred Alternative, we have approximately 2 million acres of land in the Preferred Alternatives in DFAs. Using the analysis that we did for solar, wind, and geothermal, in order to accomplish, or reach, a 20,000 planning tool [sic], we determined it would take approximately 177,000 acres. So, we need 177,000 acres out of 2 million that are currently proposed in the DFAs. Of that 2 million, almost 400,000 of that is BLM in the Development Focus Areas. We felt that there was more than adequate acreage in the DFAs on BLM and non-BLM in order to reach our planning goals without opening up lands that are needed for conservation."

[113] Drat Plan Appendix F1, p. F1-14. ["The Plan Area would be expected to permit no more than 20,323 MW of renewable energy generation (i.e., no more than that would be evaluated for permitting within the framework of the DRECP.)] It is reasonable to infer, given the absence of any suggestion or analysis otherwise, that the wind planning goals would be a cap on wind development. If this is not the case, e.g., should solar development in the DRECP area not occur as planned, then the final Plan should make this clear.

(3) if there is technology flexibility within the total renewable energy planning figure of 20,000 MW, then, were wind energy to replace some fraction of the solar capacity figure, far fewer acres would be disturbed, given the much more limited ground disturbance associated with wind projects than with solar projects.

(4) the disturbance caps may prove to be unjustified with regard to wind energy, once the impacts on the critical concern at issue become better understood relative to other impacts (e.g., unlike OHVs and cattle, wind projects occupy limited, fixed areas; moreover, wind projects are potentially compatible with OHVs and cattle grazing).

Therefore, it is not necessary to categorically prohibit the development of wind energy in order to enable other activities to make use of the disturbance cap.

Third, the statement that the wind-prohibition areas "are needed for conservation" is inconsistent with statement that wind is being prohibited to enable other activities to disturb the area. If the areas are needed for conservation, then why are other, potentially more damaging, activities such as mining, OHV use, and cattle grazing, permissible, particularly when renewable energy projects directly address the greatest threat to biodiversity, i.e. climate change?

Fourth, it is not clear that the lands on which wind energy development is proposed to be prohibited "are needed for conservation." Only 20% of the BLM LUPA conservation designations are included in the Plan-Wide Conservation Priority Area.[114] This 20% area includes less than half of CalWEA's priority wind areas.[115] Thus it is far from clear why wind energy, with its limited disturbance footprint and ability to carefully microsite turbines, is being prohibited from 80% of LUPA areas, without benefit of site-specific analysis. Even with regard to the Conservation Priority Areas, the Draft Plan has not studied wind energy projects for potential compatibility with the various conservation goals being addressed, particularly in wildlife corridor and buffer areas.

Other than limited vegetative mapping that was performed for the DRECP, no new hard data was gathered, nor research into wind energy's compatibility with terrestrial concerns conducted. The limited scientific research that has been conducted regarding wind project compatibility with the desert tortoise is favorable.[116] Therefore, the categorical exclusion of wind energy from vast public land areas cannot be supported by scientific evidence. Moreover, the arbitrary prohibition of wind energy forecloses the wind energy industry's ability to study project sites pursuant to USFWS' Land-Based Wind Energy Guidelines and its Eagle Conservation Plan Guidance for Land Based Wind Energy. The primary environmental impact of wind energy projects has long been recognized to pertain to avian and bat species – terrestrial impacts have always been

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[114] CalWEA GIS analysis. See CalWEA Exhibit 1.

[115] CalWEA GIS analysis. See CalWEA Exhibit 1.

[116] Lovich *infra n*ote 143.

mitigatable for California wind energy projects.[117] Given that developer surveys may reveal eagle nests in the DFAs (i.e., a DFA designation does not assure lack of eagle conflict[118]), limiting wind development to DFAs and constraining development outside of DFAs makes little sense.

These wind-exclusion areas encompass many active projects that site-specific investigation has shown to be very promising for near-term development. It is unreasonable to presume the incompatibility of wind projects with every species of concern intended for protection within ACECs and NLCS lands given the lack of scientific studies and literature on the compatibility of wind projects with, for example, Mohave ground squirrels and golden eagles. Further, in many of these areas, habitat models have never been confirmed by actual surveys, or the survey data is decades old.

Lastly, as pointed out by participants in the single DRECP event (over seven years of planning) designed to consider the market impacts of the DRECP,[119] it is very important not to constrain development areas to such a degree that renewable energy prices dramatically rise. Unfortunately, the Draft Plan's proposal to place off limits 80% of the wind resources in the DRECP area is a perfect recipe for doing just that.

e. Flexibility is Warranted as Part of Adaptive Management.

Rather than categorically prohibit the development of high-value wind resources in areas potentially hosting sensitive species or with potential military, OHV or other conflicts, the DRECP should enable these areas to be studied to determine potential compatibility with wind developments based on actual, current survey data, and enable development when compatibility is demonstrated. Flexibility is also warranted given possible technological advancements that could reduce or eliminate conflicts, and given future research that could fill present knowledge gaps concerning the compatibility of wind projects with avian and terrestrial species.

Eagle and California condor impacts have been the primary concerns in the permitting of over 2,000 MW of wind projects in the DRECP (Tehachapi) area since 2010. However, one example of a technological advancement reducing conflicts between wind and condors was developed within the timeframe that it took to develop the Draft Plan. Specifically, a wind project

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[117] That is, terrestrial impacts have never, to the knowledge of CalWEA and its members, caused a proposed project to fail in California.

[118] Even if DFAs were screened for eagles based on historical nest data, that data is limited and often outdated. For example, surveys performed in 2011-12 for TerraGen Power in the Tehachapi area found at least two active golden eagle territories that were not identified in the BLM's historical nest data dating to the 1970s. Source: Personal communication, Kevin Martin, TerraGen Power (February 1, 2015).

[119] Energy Panel Roundtable, July 13, 2012.

developer devised a technological means of substantially reducing the risk and, in 2013, the USFWS issued the first-ever incidental take permit for the condor. VHF equipment will enable signals of condor locations to be picked up as far as 16 miles away from radio telemetry devices already on all condors, enabling wind farm operators to slow turbine blades should the condors be detected within two miles.[120]

Several companies are pursuing bird detection and deterrence systems that are already showing significant promise in reducing avian fatalities. For example, a system available from DTBird protects eagles and other bird species from collisions at wind farms using real-time action to automatically stop a wind turbine or emit dissuasion sounds. A December 2012 report by the Norwegian Institute for Nature Research demonstrated detection of 86-96% of all bird species within a radius of 150 m where the most frequent species are eagles, and 76-92% in a radius of 300 m. (The technology has since been improved.)[121] It is reasonable to expect that, in the early years of the Draft Plan's 2040 timeframe, technologies will become available and affordable that can significantly reduce, if not eliminate, the risk of eagle and other avian fatalities.

As with eagles, other types of conflicts can be determined only with site-specific study. While maps and models may show the potential for conflict, only detailed studies and careful consideration can determine whether the conflict is real, and, if real, whether the impacts can be sufficiently mitigated. The experience of a proposed project in Imperial County, Golden Sun, clearly demonstrates this point. (See Exhibit 2.) The USFWS's 2012 Wind Energy Guidelines are also premised on the need for flexibility and site-specific study, an approach that is preferred by the wind industry (and was incorporated into CalWEA's April 2012 Proposal) as it best takes into account the realities of wind project development while protecting lands, wildlife, natural resources and other land uses.

3. THE DRAFT PLAN ARBITRARILY REJECTED CALWEA'S PROPOSED ALTERNATIVE.

As discussed below, the Draft Plan arbitrarily rejected CalWEA's proposed alternative to wind development under the DRECP. By doing so, the Draft Plan and the EIR/EIS do not rely on a "reasonable range of alternatives" and therefore violate NEPA and CEQA.

a. Evolution of CalWEA Proposals

CalWEA has made every attempt to constructively engage in the DRECP process culminating in the Draft Plan. As described below, CalWEA produced multiple proposals for consideration along the way in an effort to find common ground with the agencies and other stakeholders.

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[120] *See, e.g.,* "Terra-Gen gets OK on wind farm in wake of condor decision," *Los Angeles Times* (May 24, 2013).

[121] *See* "Features for Bird Monitoring and Mortality Mitigation at Wind Farms: Eagles and Vultures," DTBird, October 2014 (available at dtbird.com).

Unfortunately, the agencies showed little interest in meaningful dialogue aimed at understanding CalWEA's proposals in support of the Plan's ability to achieve its renewable energy goals. It comes as no surprise to CalWEA, therefore, that the Plan has not properly analyzed some of its proposals, and entirely ignored others.

The following summarizes the evolution of CalWEA's major proposals:

- **November 12, 2010 – "Wind Resource Considerations for the DRECP Process" (CalWEA Presentation to the DRECP Stakeholder Committee's Mapping Group).**

  In this presentation, CalWEA explained its "Priority Wind Resource Area" (PWRA) map depicting potentially viable wind resources in the DRECP area in terms of five wind-speed (meters/second, m/s) classifications.[122] This map was the basis for all subsequent CalWEA proposals. The PWRA excluded areas that would preclude wind development: physical constraints (e.g., urban areas, airports, hydrologic features) and administrative constraints (state and national parks, wilderness areas, refuges, roadless areas, and military lands). CalWEA also presented a map depicting existing and proposed wind energy projects, and presented a statewide wind resource map demonstrating that most of the state's best wind resources are concentrated in the DRECP area.

- **November 28, 2011 – "Planning for Wind Energy in the DRECP: CalWEA's Proposed Concepts" (CalWEA Presentation to DRECP Stakeholders).[123]**

  The presentation reviewed the PWRA and expressed concerns over the DRECP's initial "Renewable Energy Study Areas" (RESA) proposal, using CalWEA's PWRA map to explain that "wind speed is everything" and how the RESAs excluded or discouraged many of the DRECP's best wind resource areas and most active development areas. CalWEA also discussed how the initial DRECP proposal did not recognize wind energy's limited terrestrial impacts, the numerous challenges in developing wind projects that require siting flexibility, and the importance of preserving market competition in achieving GHG-reduction goals. (These concerns are identical to CalWEA's concerns with the Draft Plan.)

  CalWEA also proposed a DRECP phasing concept, dividing the PWRA into two areas, with the Phase 1 PWRA limited to areas within 10 miles of a transmission corridor.

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[122] CalWEA created this map having obtained the best available information at the time: 80-meter wind resource data from AWS-TrueWind. The associated GIS shape files were provided to the REAT and all stakeholders that requested it.

[123] The presentation and notes are posted at: http://www.drecp.org/documents/docs/comments_prelim_conservation_strategy/CalWEA_comments.pdf.

CalWEA proposed that Phase 2 areas be considered at a later time, with the benefit of additional environmental data and experience in Phase 1 areas.

Finally, CalWEA proposed a wind-specific, soft-line DRECP development proposal under which all areas within the Phase 1 PWRA would be assessed for relative impacts of wind development (with site-specific surveys as needed) and tiered mitigation levels would be created to encourage development in lower-sensitivity areas, with developments in higher-sensitivity areas contributing more resources to the conservation plan.

- **April 17, 2012 – "Proposed DRECP Scenario for Wind Energy Resources" ("CalWEA April 2012 Proposal").[124]**

In this proposal, CalWEA recognized the desire of the REAT to designate Development Focus Areas (DFAs) where project development would be encouraged through permit streamlining. CalWEA built upon its Phase 1 PWRA proposal, dividing the Phase 1 area into "Wind DFAs" and "Neutral Areas":

> **Wind-DFAs** were proposed to include the higher-quality wind resources (the PWRA Phase 1 area, less 5-6 m/s wind speed areas) that do not overlap with ACECs and DWMAs. CalWEA proposed that these areas generally be avoided for designation as part of the Reserve Design unless deemed compatible with wind development, and that projects located in these areas receive maximum permit streamlining benefits for terrestrial species. No streamlining was proposed for avian issues; rather, compliance with current state and federal guidelines was envisioned.
>
> **Neutral Areas** were proposed to include the balance of lands within the Phase 1 PWRA that are not designated as either part of the Wind-DFA or the Reserve Design. These areas would be potentially open to development, subject to potential site-specific terrestrial biological surveys and determinations of compatibility with wind energy development. CalWEA recognized that mitigation requirements in these areas may be higher, and that development would not be streamlined.[125] Again, no streamlining was proposed for avian species.

With regard to Reserve Design areas, however, CalWEA emphasized that, "Unless deemed compatible with wind developments, planners should avoid identifying Reserve

[124] These filed comments are posted at: http://www.drecp.org/meetings/2012-03-14_meeting/comments/CalWEA_Proposed_DRECP_Wind_Scenario_2012-04-17.pdf.

[125] CalWEA proposed, however, that any authorized developments be able to participate in fee-based mitigation programs, be covered by incidental take permits, and receive "no surprises" assurances.

Design Areas within the Phase 1 PWRA, particularly within the Wind-DFA, limiting such areas to those deemed critical to the achievement of the DRECP's conservation goals." Further, CalWEA called for evaluating the compatibility of wind development with the specific biological goals and objectives that are being met by the Reserve Design Area, such as corridor and buffer areas, and to allow wind development where compatibility is determined.[126]

- **August 16, 2012 – CalWEA Comments on the DRECP July 2012 Stakeholder Meeting and Materials ("CalWEA August 2012 Comments").[127]**

  In commenting on the draft Alternatives presented by the REAT in July of 2012, CalWEA repeated the very same concerns it had made earlier on the REAT's RESA proposal and once again emphasized the importance of enabling site-specific studies in potential conflict areas rather than categorically excluding high-value wind resources. CalWEA also refined its April 2012 Proposal to reduce its proposed DFA areas[128] by excluding DoD high potential conflict areas and areas with local land use zoning restrictions that currently preclude or discourage wind development. The proposal also defined the "equally important" Wind Evaluation Areas – areas that would require further site-specific study to determine potential wind compatibility.

  The Wind Evaluation Areas were comprised of the areas newly excluded from CalWEA's previously-proposed DFAs along with the rest of the "Neutral" area from CalWEA's April 2012 Proposal. As with the April 2012 Proposal, any development in the Wind Evaluation Areas would be subject to meeting any specific criteria pertaining directly to any relevant potential conflict(s) in the area, whether military, ACEC, local zoning, or OHV conflict. The proposal noted the lack of scientific studies and literature on the compatibility of wind projects and the species of concern in each particular ACEC area, and proposed that the DRECP include a research plan for addressing knowledge gaps that would include site-specific studies. The results would inform adaptive management of the Plan.

- **July 10, 2013 "Ideas for Future Assessment Areas on Public Land," (CalWEA Presentation to DRECP Agencies)**

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[126] CalWEA April 17, 2012, Proposal at p. 6-7.

[127] These filed comments were apparently not posted by the DRECP on its website. However, they can be found at: http://www.calwea.org/pdfs/publicFilings2012/CalWEA_Comments-DRECP_July_2012_Stakeholders_Meeting_8-16-12_Fnl.pdf.

[128] CalWEA's Modified DFAs included slightly less acreage than the REAT Agency Team's Alternative 5 Wind DFA, but captured 44% of high priority wind resources in the DRECP area vs. 16% captured in the REAT Agency Team alternative.

In this presentation, CalWEA reviewed its previous analysis regarding the need to preserve siting flexibility and the ability to conduct site-specific studies, and proposed further details (consistent with past proposals) aimed at preserving the highest-quality wind resource areas while addressing the knowledge gaps needed to inform permitting decisions. CalWEA prepared a new map very clearly highlighting the top three wind resource tiers (those of 6-7 m/s and above), and highlighting the highest-priority existing project areas and areas with active or recently-active project applications. These areas were subdivided to indicate areas in which wind project applications would carry an obligation to conduct rigorous wind species-compatibility studies in conservation areas (e.g., ACECs), and/or obtain DoD clearance.

b. CalWEA's April 2012 Proposal Was Not Properly Analyzed

In Chapter II.8, "Alternatives Considered But Not Carried Forward, " the Draft Plan considers only CalWEA's April 2012 Proposal, and not the refined proposal submitted four months later or further iterations, as described above.[129] Nevertheless, essential features of CalWEA's later proposals remained substantially similar to the April 2012 Proposal. The Draft Plan's major failing was in improperly characterizing and "analyzing" the April 2012 Proposal.

The rationale for eliminating CalWEA's April 2012 Proposal was that it "would only partially meet the interagency goal of providing for the long-term conservation and management of Covered Species and other physical, cultural, scenic and social values with the Plan Area." Five examples were provided, such as conflicts with golden eagles in some areas, conflicts with two-mile DFA buffer areas applied by the Draft Plan around tribal lands, overlap with areas proposed for conservation through proposed legislation, and conflicts with DoD-identified locations. This "analysis" *assumes conflict*, whereas an essential feature of CalWEA's proposal was to enable site-specific study in order to *evaluate conflicts*. For example, CalWEA's proposal would require compliance with state and federal avian siting guidelines, including the Bald and Golden Eagle Protection Act (BGEPA) guidance document, which requires developers to thoroughly evaluate risk, avoid and minimize impacts, and mitigate any unavoidable impacts. High-risk projects would not be issued an Eagle Take Permit. Similarly, as discussed in section 3.d, below, the Draft Plan assumes DoD conflict even while footnoting the fact that projects in zones with potential conflicts will be closely scrutinized by DoD but are not categorically precluded. Finally, that certain areas have been *proposed* to be protected by federal legislation[130] does not free the REAT from its obligation to analyze wind resource quality, biological objectives, and potential compatibility of wind projects with those objectives in these areas.

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[129] CalWEA's proposal is addressed at Draft Plan pp. II.8-14 through II.8-17.

[130] Proposed Feinstein Bill Desert Conservation and Recreation Act.

The Draft Plan entirely missed – and failed to analyze – the whole point of CalWEA's proposal, which is to provide flexibility in high-quality wind resource areas so that developers can conduct site-specific investigations to determine whether or not broadly determined conflicts (often based on outdated models and occurrence databases) actually exist or can be adequately mitigated, and to allow for technological developments that may, in the future, enable compatibility. The Golden Sun case example demonstrates that presumed conflicts often do not exist, or their impacts can be adequately mitigated, when actual circumstances are examined.

Indeed, while the Draft Plan notes that CalWEA's proposal included, in addition to Wind DFAs, a "Neutral Area" which would be open to wind development (subject to site-specific evaluation), the latter area *was not included* in the Draft Plan's Figure II.8-1 depicting the proposal geographically and was not included in the REAT analysis.[131,132] See Maps G and H. Part of the rationale given for eliminating CalWEA's alternative was that "between 49% and 61% of the DFAs in the DRECP are the same as those identified in the CalWEA Proposed Wind Areas Alternative." But these figures appear to apply only to CalWEA's proposed Wind DFA area and to ignore the proposed Neutral Area which CalWEA characterized as "equally important."[133] The Draft Plan's analysis also failed to take into account the highest quality wind resources and commercially active areas in the DRECP. As a result, as documented in section 2.a, the Draft Plan's Preferred Alternative captures just 12% of the wind resource areas of sufficient quality to be potentially commercially feasible today (CalWEA's PWRA Tiers 1P and 2).

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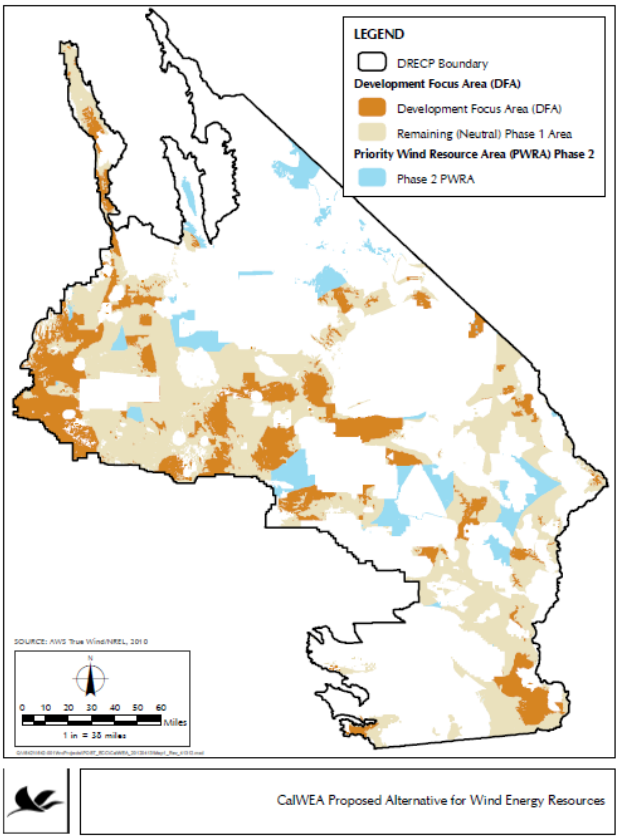
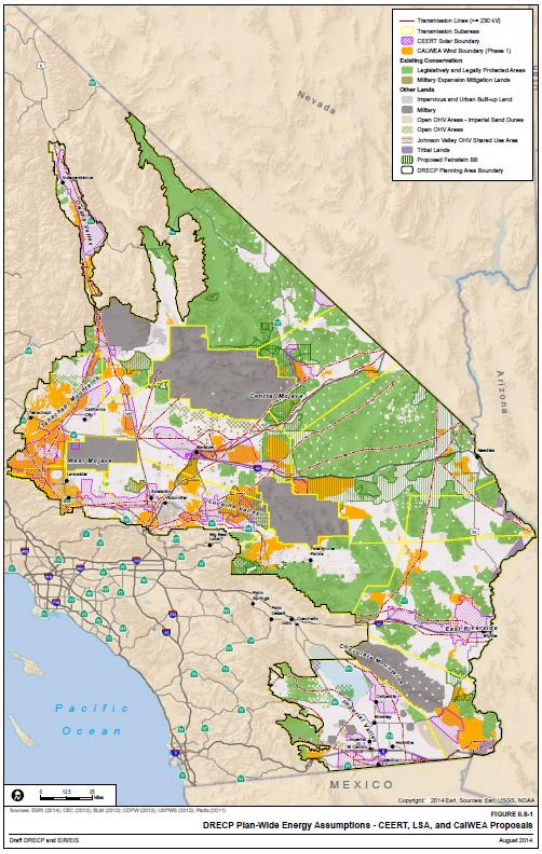
[131] Draft Plan Figure II.8-1, p. II.8-11. See also p. I.3-55, stating that the REAT Agencies considered this same portion of CalWEA's proposal in "subsequent development of the DRECP alternatives and DFA configurations."

[132] CalWEA's proposal that wind development be permitted in Reserve Design areas where deemed compatible, and Phase 2 of the proposal, were also referenced in the description of the proposal but were not addressed in the analysis.

[133] It is not completely clear from the Draft Plan what part of CalWEA's proposal was analyzed. The map clearly shows only the Wind DFA areas identified in CalWEA's April 2012 Proposal. However, analyzing the acreage figures from Table II.8-2, it appears that the Draft Plan's analysis may have included CalWEA's entire "Phase 1" PWRA (which includes areas identified as wind-resource Tiers 4-6 in CalWEA's March 2013 proposal). As CalWEA repeatedly emphasized in the months and years since April 2012, the April 2012 Proposal was aimed at a much larger wind energy goal for the 2050 timeframe; the wind resource quality in lower priority areas is not expected to be commercially relevant in the 2040 timeframe and thus should not have been included in the analysis. Approximately one-third of the 49%-61% area that the Draft Plan states as being the same as the areas identified in the CalWEA Proposal are within these lower priority areas, identified as Tiers 4-6 in CalWEA's March 2013 proposal.





Maps G and H. On the left, CalWEA's April 2012 Proposal depicts proposed DFAs and "Neutral" areas – areas that would remain open to study and potential development without streamlining. On the right is the Draft Plan's depiction of CalWEA's April 2012 Proposal (areas in orange), which reflects only CalWEA's proposed DFAs and not its proposed Neutral areas.

CalWEA pointed out this significant oversight in its August 2012 comments, noting that not only were all of CalWEA's proposed DFA areas captured in the REAT's July 2012 Briefing materials and Overview of DRECP Alternatives, but that the Neutral Area was not included.[134] CalWEA called upon the DRECP to accurately portray CalWEA's April 2012 Proposal.

The Draft Plan also failed to analyze other important aspects of CalWEA's April 2012 Proposal and comments, including CalWEA's much higher wind planning goals (as discussed in section 1) and the following related issues:

- **Potentially lower statewide environmental impacts.** Given the superior quality of renewable resources located in the DRECP, CalWEA explained that, while

[134] CalWEA August 16, 2012, comments at footnote 12.

environmental impacts would increase in the DRECP area, they can be expected to be lower overall, statewide, for two reasons: (1) the greater wind energy intensity in the DRECP will require significantly less land to be developed and fewer turbines to be installed than were the same amount of wind energy to be generated from capacity developed outside of the DRECP in California, and (2) fewer transmission corridors, substations, and power lines would be required statewide if development were concentrated in the DRECP area.

- **Lack of Need for Additional DRECP-Area Transmission Lines.** CalWEA explained that wind energy production has a daily profile that is generally complementary to solar production (solar declines in the late afternoon as wind production rises). Therefore, it is likely that a transmission system sized to accommodate high penetrations of solar energy from the DRECP area will be able to accommodate a similarly large amount of wind generation.
- **Importance of preserving inter-technology competition for the ability to achieve GHG-reduction goals.** CalWEA argued that the DRECP should plan for an amount of *each* renewable technology that is an upper-bound estimate of the reasonably possible. That is, *each Alternative* should plan for the possibility that any technology – though obviously not all of the technologies, which are competing – could reach its upper-bound estimate. CalWEA provided many reasons for this: the inability to predict the future; the importance of preserving competition among and between technologies to keep costs as low as possible, thereby preserving society's ability and willingness to pay to achieve the state's GHG-reduction goals; and the importance of not prejudging the state's energy policies. CalWEA also noted that high-end planning figures will not pre-ordain development on that order, and that Natural Community Conservation Plans and Habitat Conservation Plans require mitigation to stay ahead of impacts.

All of these issues that the Draft Plan has not considered have important implications for the DRECP's purposes and needs and properly should have been considered in the Draft Plan and EIR/EIS.

c. An Appropriate Analysis of Terrestrial Wind Impacts Was Not Conducted

Since the early days of the DRECP process, CalWEA has consistently called for an evaluation of the potential compatibility of wind energy in reserve, corridor and buffer areas. Intact areas within wind project boundaries can support viable populations of many sensitive taxa, as well as wildlife movement, presuming careful siting, mitigation and monitoring.[135] Indeed, wind

[135] *See, e.g.,* CalWEA comment letter on Notice of Intent and Notice of Preparation for Joint Environmental Impact Statement / Environmental Impact Report for the Desert Renewable Energy Conservation Plan, September 12, 2011, p. 4.

projects can protect the project area from other types of disturbance that affect sensitive species.[136] Compared to many other types of development, wind energy offers considerably lesser species impacts,[137] and positive population growth may be possible for sensitive species in project areas. This stems from wind energy's small ground disturbance footprint and the ability to carefully micro-site turbines. The co-location of wind energy projects in reserve design areas could facilitate the ability to identify and secure large, contiguous reserve areas while simultaneously preserving high quality wind resource areas for development.

Had a proper evaluation been done, it is reasonable to expect that wind energy would be found to have fewer wildlife and habitat impacts than other types of development, and that such impacts could be sufficiently low to justify wind development in broader areas. In the words of Dr. Wayne Spencer, Chair of the first Independent Science Advisory panel to the DRECP:

> …[O]bviously, the siting is extremely different between the different technologies. And for example, wind development may be one of those things that is compatible either in reserve areas or in buffer areas…They are compatible with a lot of biological resources …[W]ind turbines might be okay in, for example, linkage areas because they are not cutting off wildlife movement, depending on the specifics of fencing and lighting and all these other things that could influence animal movements…[138]

Unfortunately, no such consideration was made, or analysis conducted, for the Draft Plan, as discussed below.

i. <u>The analyses informing the Draft Plan are inappropriate and inconsistent.</u>

The Draft Plan separates impacts for wind Covered Activities into two categories: 1) siting, construction, and decommissioning impacts, and 2) operational impacts. The Draft recognizes that "the impacts to biological resources from wind siting, construction of wind turbines and associated facilities, and decommissioning would affect substantially less acreage than the wind project area" and uses an assumption that "6% of the wind project area would be impacted by

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[136] Lovich *infra n*ote 143. Lovich suggested (p. 25) that a factor contributing to the high survivorship of desert tortoise at the studied wind project site is the protected status of the site, which is restricted by fences and gates, dramatically decreasing human activities and trampling by cattle.

[137] See, e.g., Newman, J., E. Zillioux, C. Newman, C. Denny, P. Colverson, K. Hill, W. Warren-Hicks, and S. Marynowski. 2009. Comparison of Reported Effects and Risks to Vertebrate Wildlife from Six Electricity Generation Types in the New York / New England Region. New York State Energy Research and Development Authority (NYSERDA), 17 Columbia Circle, Albany, New York, 12203.

[138] Dr. Wayne Spencer, DRECP Stakeholder Committee Meeting, August 2010.

ground disturbance."[139] This assumption is overly conservative and does not reflect typical or average ground disturbance impacts in the region which are generally in the range of 2-5%, and typically closer to 2%. As a result, the estimated acreage of impacts due to wind Covered Activities in the plan are substantially overestimated.

For operational impacts, the Draft is inconsistent in its assumptions regarding potential operational impacts from wind Covered Activities. In section IV.7.1.1.2 Operational Impacts, the Draft presents the assumption that "the impacts from wind operations (both terrestrial and bird-bat related) are quantified using wind project area and rotor swept area."[140] Wind project area is defined as the *total land area* affected by a Covered Activity, including the area directly and indirectly affected, equating to 7.1 acres/MW for solar development and 40 acres/MW for wind development.[141] However, in Table IV.7-46 which summarizes plan-wide terrestrial operational impacts for the Preferred Alternative, 25% of the project area for wind was assumed to be impacted – i.e., 10 acres/MW, substantially greater than the assessment for solar-project disturbance, which is wholly inappropriate. Potential impacts to terrestrial species from wind Covered Activities include disturbance, injury, mortality and habitat loss.[142] With the possible exception of disturbance, there is no evidence to suggest that potential operational impacts would occur outside of areas of ground disturbance (i.e., footprint). In the case of disturbance from operational impacts, there is no evidence that Covered Species will avoid 25-100% of the project area of a wind facility. Using desert tortoise as an example, a recent long-term study by Lovich indicated that a wind project sited in high quality tortoise habitat had no long-term impacts on the local population.[143] Furthermore, Lovich found that the local tortoises had equivalent, and in some cases improved, life-history traits compared to tortoises living in more natural areas (e.g., Joshua Tree National Park). While Lovich's work on the desert tortoise is cited in the Draft Plan's Baseline Biology Report (Appendix Q, Species Profiles), we were not able to find any reference in the Draft Plan to this researcher's work on wind energy impacts on the tortoise, indicating that it was not taken into account in the Plan's analysis.

Revisions to the Draft's terrestrial operational impact analysis for wind Covered Activities is greatly needed to accurately estimate potential impacts from wind energy development under the DRECP.

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[139] Draft Plan at p. IV.7-3

[140] Draft Plan at p. IV.7-9

[141] Draft Plan at p. Glossary-15.

[142] Draft Plan at p. IV.7-232 (Impact BR-4).

[143] Lovich, Jeffrey. (U.S. Geological Survey). 2013. Assessing the Long-Term Survival and Reproductive Output of Desert Tortoises at a Wind Energy Facility near Palm Springs, California. California Energy Commission. Publication number: CEC-500-2014-005.

ii. Wind prohibitions on BLM land were made without regard to terrestrial wind impacts.

As discussed in Section 2.d, under the Preferred Alternative and Alternative 2, renewable energy projects and related ancillary facilities would not be allowed virtually on any BLM lands outside of DFAs,[144] taking off the table some 3 million acres currently available for wind development.[145] (While the prohibition was developed for BLM lands only, the analysis assumed that this Conservation and Management Action, CMA, would be applied also to nonfederal lands.[146]) The rationale for the Draft Plan's prohibition of renewable energy development within National Conservation Lands, ACECs, Wildlife Allocations and SRMAs is not clearly identified, except in general terms to meet unquantified Plan conservation goals. The impact analysis for the No Action Alternative, which still allows renewable energy development on existing ACECs and SRMAs, states that "Overall, the potential impacts to existing BLM ACECs and SRMAs would be minimal."

While we disagree with the implication that there would be no renewable energy development in these areas under the No Action Alternative,[147] the assumption that there would be no development in these areas does not support the decision to prohibit renewable energy within these BLM-managed lands. More importantly, nowhere in the Draft Plan is it specified that Covered Activities are incompatible with the allowed uses of these lands. For example, Table IV.27-6 indicates that the BLM NCLS management approach is that "use is allowed if no net loss of NLCS value and impacts are mitigated" and that allowed uses consist of a "variety of uses if management is compatible with NLCS values." Wind Covered Activities are likely compatible with many if not all of the values presented in Table IV.27-6, particularly as terrestrial impacts are generally minimal compared to other forms of energy development (e.g., solar, oil and gas) and other activities (OHV, cattle grazing), which are not prohibited.

Desert tortoise habitat is one biological resource mentioned frequently as occurring on BLM-managed lands. Excluding wind Covered Activities from these lands because of assumed impacts to desert tortoise and its habitat is inappropriate. First, there is evidence of co-existence of healthy desert tortoise populations within wind energy developments,[148] and no evidence to

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[144] *See, e.g.,* Draft Plan at p. II.3-382, II.5-36, p. IV.14-16, and p. IV.14-20. While the Draft Plan text often does not make clear that renewable energy is proposed to be prohibited in all of these areas, this intention was stated very clearly by Vicki Campbell on a DRECP WebEx. See further discussion in Section 2.d.

[145] Table IV.14-11 (p. IV.14-31). This figure pertains to the Preferred Alternative. Alternative 2 is more restrictive. See p. II.5-36.

[146] P. IV.14-20. We interpret this statement to be referring only to the nonfederal land withholdings within the BLM managed lands, and not to all nonfederal lands in the plan. The statement should be clarified.

[147] The Draft Plan states that 5,442 MW would be developed under the No Action Alternative, and wind energy is not currently prohibited in these areas. Appendix F2, p. F2-4.

[148] Lovich *supra* note 143.

the contrary has been cited. Second, the analysis and formulation of tortoise conservation areas (TCAs) are flawed, and rely on outdated data sources. For example, the mapped occupied habitat within the desert tortoise species distribution model indicates that there are many areas of the TCAs not considered occupied by tortoise.[149] Additionally, recent site-specific protocol surveys have revealed disparities between the actual surveyed tortoise density and the predicted habitat quality from USGS models.[150] Lastly, wind energy development is estimated to contribute less than 3% to increased risk to desert tortoise populations, compared to approximately 6% from open-OHV area use, 7% from disease, 10% for military operations, and over 20% for urbanization.[151]

Golden eagle nesting and foraging habitat is shown to be present on the BLM land designations proposed for exclusion from renewable energy development. Much of the eagle nest dataset was provided by BLM; however, historic nest records are outdated and do not reflect current nest occurrence or occupancy, as evidenced by site-specific surveys.[152] Furthermore, the implementation of CMAs (e.g., setbacks from active nests) would avoid impacts to these golden eagle resources. Therefore, categorically prohibiting Wind Covered Activities from BLM-managed land in order to reduce impacts to golden eagles is not justifiable.

Both cases of Covered Species provide examples where available information is insufficient for planning at such a large scale. Renewable energy industries need the flexibility to investigate potential impacts and site their projects accordingly. Removing over 3 million acres of BLM lands for renewable energy exploration and development would greatly constrain the potential for wind energy to contribute to California's greenhouse-gas reduction goals because developers would be prevented from conducting site-specific surveys to provide current, real (as opposed to modeled) information as to what potential impacts are actually present on a site.

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[149] Nussear, K.E., Esque, T.C., Inman, R.D., Gass, Leila, Thomas, K.A., Wallace, C.S.A., Blainey, J.B., Miller, D.M., and Webb, R.H., 2009, Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona: U.S. Geological Survey Open-File Report 2009-1102. DRECP DataBasin Gateway. Data Layer Available At: http://databasin.org/maps/new#datasets=a1f5e25b9b944f9fa6aa3be8f54f8a2e.

[150] See Golden Sun Case Study, CalWEA Exhibit 2.

[151] Darst, C., P. Murphy, N. Strout, S. Campbell, K. Field, L. Allison and R. Averill-Murray. 2013. A Strategy for Prioritizing Threats and Recovery Actions for At-Risk Species. Environmental management 51(3): 786-800.

[152] K. Martin *supra* notes 97 and 118.

d. DoD Conflict Areas Appear to Have Been Eliminated for DFA Consideration

The Draft Plan appears to have precluded DFAs in some areas based on military conflicts with wind energy projects, which is inconsistent with DoD policy.[153] As part of the rationale for rejecting CalWEA's Proposed Wind Areas Alternative,[154] the Draft Plan cites "conflicts with Department of Defense-identified locations with a high likelihood of unacceptable risk to national security." Further, the REAT agencies made a judgment that restrictions on tall structures "would not be lifted for the foreseeable future" such that areas to the north and east of Edwards Air Force Base would preclude wind development "for the life of the DRECP."[155] It appears that these "restrictions" coincide with attributes within the geodatabase provided to CalWEA by the DRECP that include a category labeled "DoD Wind Restriction Area."

If the REAT agencies have presumed conflicts, thereby precluding development of priority wind resource areas in the Draft Plan, it has effectively pre-determined the outcomes of site-specific review of projects in the DRECP area by the DoD Siting Clearinghouse via Section 358 as well as the FAA Obstruction Evaluation/Airport Airspace Analysis. This BLM precedent was already set in its Record of Decision for the West Chocolate Mountains Renewable Energy Evaluation Area (August 12, 2013), whereby the BLM applied extra-jurisdictional, broad-brush exclusion of wind energy development on public lands. Therefore, it would not be not surprising if the REAT agencies have followed suit in the Draft Plan by inappropriately applying restrictions that are inconsistent with DoD policy, despite the fact that airspace-use analyses and identification of conflicts are the purview of other agencies and undermines established processes.

It is perplexing that, in the footnote accompanying the statement regarding military conflicts,[156] the REAT agencies correctly acknowledge that, according to DoD policy, wind development is not precluded from areas with potential conflicts, citing the ability for a developer to go through the Siting Clearinghouse process.

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[153] It is not clear why some areas with DoD wind conflicts would therefore be included; however, as DFAs are "technology neutral," they may have been included to accommodate other technologies.

[154] Draft Plan at p. II.8-17.

[155] Draft Plan at p. F1-3 and -4.

[156] Draft Plan at p. II-8-17.

e. The Draft Plan and the EIR/EIS Are Not Based on a "Reasonable Range of Alternatives" and Therefore Violate NEPA and CEQA.

The Draft improperly fails to carry forward CalWEA's April 2012 Proposal.[157] Specifically, instead of providing a more robust analysis of the proposal as a project alternative, the Draft Plan summarily dismisses CalWEA's proposal with barely any explanation. Further, what little explanation that is provided dismisses CalWEA's proposal without any legal justification. Rather, given that CalWEA's proposal specifically was designed to achieve the DRECP's goals as recited in the Draft Plan, it should have been carried forward as an additional project alternative.

Both NEPA and CEQA require that an agency identify and discuss alternatives to a proposed project. 42 U.S.C. § 4332(2)(C)(iii); Cal. Pub. Resources Code, §§ 21002, 21002.1(a), 21100(b)(4), 21150. Such policy requirement stems from the fundamental statutory policy that public agencies should require the implementation of feasible alternatives or feasible mitigation measures to reduce a project's significant environmental impacts. *See, e.g.*, Pub. Resources Code, § 21002. Indeed, in the NEPA context, the discussion of alternatives is so important that the Council on Environmental Quality's regulations refer to such requirement as the "heart" of an EIS. 40 C.F.R. § 1502.14; *see also Monroe County Conservation Council, Inc. v. Volpe*, 472 F.2d 693, 697-98 (2d Cir. 1972) (requirement for a thorough study and detailed discussion of alternatives is the "linchpin" of the entire EIS); *Grazing Fields Farm v. Goldschmidt*, 626 F.2d 1068, 1072 (1st Cir. 1980) (same). The California Supreme Court, the context of CEQA, likewise has described the discussion of alternatives as part of "the core of an EIR." *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 564 (1990).

Whether proceeding under NEPA or CEQA, the stated purpose of a proposed project determines the universe of alternatives that an agency must consider. *Citizens Against Burlington v. Busey*, 938 F.2d 190 (D.C. Cir. 1991); *League of Wilderness Defenders-Blue Mountain Biodiversity Project v. Bosworth*, 383 F.Supp.2d 1285 (D. Or. 2005) (stating that the purpose and need statement dictates the range of reasonable alternatives); 14 Cal. Code Regs., § 15126.6(a); *Watsonville Pilots Ass'n v. City of Watsonville*, 183 Cal.App.4th 1059, 1089 (2010). And while an agency need not discuss every possible alternative to a project, it must describe a range of reasonable alternatives to the project or to its location. Cal. Code Regs. tit. 14, § 15126.6(a); *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553 (1990); *Sierra Club v. United States*, 23 F.Supp.2d 1132, 1144 (N.D. Cal. 1998). The nature and scope of the alternatives to be studied is governed by the rule of reason. Cal. Code Regs. tit. 14, § 15126.6(a); *Citizens of*

[157] As CalWEA's April 2012 Proposal was substantially similar to later iterations of the proposal that CalWEA made, we accept for purposes of argument here that it was sufficient for the Draft Plan to consider only the April 2012 Proposal. However, we note that later proposals, at least those submitted at least a year in advance of the issuance of the Draft Plan, should also have been considered.

Goleta Valley v. Board of Supervisors, 52 Cal.3d 553 (1990); *Sierra Club v. United States*, 23 F.Supp.2d 1132, 1144 (N.D. Cal. 1998). Accordingly, an agency must consider a reasonable range of those alternatives that might feasibly and practically attain most of the intended project objectives.

Here, CalWEA's April 2012 Proposal specifically was designed to attain the DRECP's fundamental interagency goal of providing a streamlined process for the development of utility-scale renewable energy, while also providing for the long-term conservation and management of Covered Species and other physical, cultural, scenic, and social values within the Plan Area.[158] More specifically, as described in CalWEA's proposal, and as summarized in sections 3.a and 3.b above, the proposal would preserve the state's highest quality wind resource areas, allowing for permit streamlining for terrestrial species in areas without conservation designations, while providing for site-specific studies in areas with conservation designations to determine potential terrestrial species compatibility with proposed wind energy projects, given the limited ground-disturbance footprint of wind projects and ability to micro-site turbines. CalWEA cited scientific evidence to support potential compatibility with Covered Species. CalWEA proposed no permit streamlining for avian species, thus all current state and federal siting regulations and guidelines would be applicable. CalWEA's proposal would reduce environmental impacts by prioritizing for development areas with the highest quality wind resources (reducing the number of turbines required) that are close to transmission corridors (avoiding new transmission corridors and long generation interconnection lines) and that do not overlap with lands that have been classified as having special environmental concerns (ACECs and DWMAs).[159] The proposal recognized the fact that ACEC and DWMA areas, which contain a variety of unique concerns and associated management prescriptions, have not been studied for their compatibility with wind energy developments. By excluding these areas from Wind-DFAs, the proposal provided for any studies that may be necessary to understand any site-specific impacts and determine compatibility before a wind development is permitted. This element of the proposal was critical, given the reality recognized in CalWEA's proposal that numerous site-specific factors will determine whether, and to what extent, a wind energy project can be built at a particular site, that these factors will not be controlled by the DRECP, and therefore, in order to achieve Plan goals, significant area must be provided to enable developers to identify sufficient sites that will ultimately prove commercially feasible.[160] Given such strong correlation with the DRECP's fundamental goals, CalWEA's proposed alternatives absolutely should have been analyzed as an additional project alternative. Instead, it was rejected perfunctorily from any analysis whatsoever in the EIS. This was a missed opportunity of profound significance, as consideration

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[158] Draft Plan at p. I.1-1.

[159] CalWEA letter re Proposed DRECP Scenario for Wind Energy Resources April 17, 2012, at pp. 2-3.

[160] CalWEA letter re Proposed DRECP Scenario for Wind Energy Resources, April 17, 2012, at p. 2; *see also* CalWEA letter re Comments on the DRECP July 2012 Stakeholder Meeting and Materials, August 16, 2012.

of CalWEA's proposals would have lead the REAT agencies to look outside of a rigid zoning approach, and instead consider a more flexible alternative. Such an alternative would allow for wind energy development to meet GHG-reduction goals while at the same time achieving equal or greater conservation benefits than the Draft Plan would enable.

Moreover, because it lacks any consideration of CalWEA's proposal, the Draft Plan fails to consider a reasonable range of alternatives. Specifically, the Draft should have included a feasible wind alternative. As explained above in Section A, the Draft Plan substantially underestimates the amount of renewable energy that will be required not only by 2040 but also by 2050. In addition, the particularly low fraction of the 20,000 MW that is estimated to be met with wind energy (ranging from 398 MW under Alternative 1 to 5,810 MW under Alternative 2) is completely arbitrary. Had any economic or reliability analysis been conducted, a far greater need for wind energy would have been shown. Given this reality, CalWEA's proposed alternative, which includes a proposal for greater use of wind energy and more realistically would assure that long-term greenhouse gas reduction goals will be met, properly should have been carried forward in the Draft Plan. Absent a reasonable range of alternatives, the EIR/EIS is legally defective under both NEPA and CEQA. *See, e.g., Southeast Alaska Conservation Council v. Federal Highway Administration*, 649 F.3d 1050 (9th Cir. 2011) (finding NEPA document failed to include a proper range of alternatives); *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553 (CEQA requires analysis of a "reasonable range of alternatives").

Notwithstanding the compatibility of the proposal with the DRECP's fundamental goals, the Draft Plan rejects CalWEA's proposal on the basis that it "*would only partially meet* the interagency goal of providing for the long-term conservation and management of Covered Species and other physical, cultural, scenic and social values within the Plan Area."[161] Further, the Draft also identifies five potential resource conflicts that could result from implementation of the CalWEA proposal.[162] Neither of these reasons, however, is legally justified, and the Draft provides no other compelling rationale for its rejections of CalWEA's proposed alternative.

As an initial matter, the Draft Plan's rejection of CalWEA's alternative on the basis that it "would only partially" meet the DRECP's goal is unsubstantiated. No analysis of wind energy's limited terrestrial footprint and potential compatibility with Covered Species was conducted. No assessment of existing scientific literature suggesting wind energy compatibility with one of the desert's flagship species, the desert tortoise, was conducted. No analysis was conducted of CalWEA's proposal to enable site-specific study to assess potential conflicts and compatibility in specific conservation areas. Instead, the Draft Plan simply assumes conflict. Without analyzing the impacts – rather, potential lack of impact upon site-specific review – how did the Draft Plan

[161] Draft Plan at p. II.8-16.

[162] Draft Plan at p. II.8-17.

determine that 3 million acres must be put off limits to wind energy? Why not 1 million or 4 million? There is no substantial evidence in the record that would warrant the categorical exclusion of wind energy across such a vast and variable landscape.

Further, while alternatives must be able to implement *most* project objectives, they need not be able to implement *all* of them. *See, e.g.*, *Mira Mar Mobile Community v. City of Oceanside*, 119 Cal.App.4th 477 (2004). Indeed, the CEQA Guidelines assume that the alternatives described in an EIR will not necessarily attain all of the project's objectives. *See, e.g.*, *Watsonville*, 183 Cal.App.4th at 1087. Conversely, there is no requirement that the fully analyzed alternatives satisfy every key objective of the project. Here, because CalWEA's proposal certainly would meet most – if not all – project objectives, there is no credible basis on which the Draft can dismiss CalWEA's proposal simply because "it would only partially meet" the DRECP's goals.

Nor is the fact that the proposal could result in a limited number of resource conflicts – even if true – any more compelling of a reason to reject the proposal. Indeed, the Draft readily admits that each of the alternatives that are carried forward would result in certain resource conflicts.[163] That is, the Draft Plan's stated goal is not to avoid resource conflicts entirely, but instead to balance any resource conflicts with the benefits to be obtained from the provision of a streamlined process for the development of utility-scale renewable energy.[164] This is precisely the balance that CalWEA's proposals have sought to achieve. Moreover, given the limited ground disturbance of wind energy projects, this is a balance that wind energy development is particularly well-suited to achieve.[165] Accordingly, given that the Draft Plan was designed to meet project objectives, and that the Draft otherwise fails to consider a reasonable range of alternatives, the Draft properly should have carried CalWEA's proposed alternative forward for further analysis.

4. THE DRAFT PLAN CANNOT SUCCESSFULLY BE IMPLEMENTED

a. Lack of Local Agency Support

The Draft Plan's failure to analyze the local land use policies and practices of local agencies, particularly where the Draft relies so heavily on such entities' lands for the development of utility-scale renewable energy projects, is particularly perplexing. That is, as explained above in section 2.c, the DFAs on private lands account for the majority of the total DFA acreage under

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[163] *See, e.g.*, Draft Executive Summary, pp. 8, 39 (recognizing that each of the alternatives represent a balancing of renewable energy, conservation, and other goals); Draft, at p. II-1-2 (noting that Alternative 2, which includes the most conservation, still contains resource conflict areas).

[164] Draft Plan at p. I.1-1.

[165] CalWEA letter re Comments on the DRECP July 2012 Stakeholder Meeting and Materials, August 16, 2012, at pp. 13-14.

the various Plan Alternatives. Despite such substantial reliance, however, the Draft wholly fails to analyze the land use policies and practices that govern the development of renewable energy projects on these lands – despite the fact that they play such a key role in the overall implementation of the Plan. In short, such failure undermines the entire structure of the Draft Plan and renders all such analysis and corresponding conclusions arbitrary and capricious in violation of the law. *See* U.S.C. § 706(2)(A).

For example, had the Draft considered the extent of local agency support, it would have found that Los Angeles, San Bernardino and Inyo Counties, among other local jurisdictions, have taken recent actions or otherwise demonstrated their opposition to, or lack of interest in, the development of utility-scale renewable energy development on private lands. Such facts underscore the reality that, although future development *could* occur on these and other lands, it is by no means a certainty. But the Draft wholly fails to account for these various contingencies.

b. The Draft Fails to Detail the Funding That Will be Available to Implement the Proposed Mitigation Programs and Provides for No Contingency in Event of a Funding Shortfall.

Contrary to the requirements of the ESA and CESA, the Draft Plan provides virtually no analysis of overall funding assurances. That is, despite the fact that the Draft Plan itself estimates total mitigation costs for the Preferred Alternative to be approximately $1.67 billion,[166] the Draft Plan provides no particular information with respect to how such funding actually will be assured and entirely fails to account for the substantial likelihood that a funding shortfall results. This is plainly insufficient under both the ESA and CESA.

Pursuant to both federal and state law, the Draft Plan must detail the funding that will be made available to implement the wide variety of mitigation programs proposed for the DRECP. *See* 16 U.S.C. § 1539(a)(2)(B)(iii); *National Wildlife Federation v. Babbitt*, 128 F.Supp.2d 1274, 1294 (E.D. Cal. 2000); Cal. Fish & G. Code, § 2081(b)(4); *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal.App.4th 1018, 1044 (2006); *see also Fish And Wildlife Service & National Marine Fisheries Service, Habitat Conservation Planning And Incidental Take Processing Handbook*, 3-33 (1996) ("The ESA requires that the HCP detail the funding that will be made available to implement the proposed mitigation program."). Further, in providing for such funding, entities cannot rely on the speculative future actions of others. *Southwest Center for Biological Diversity*, 470 F.Supp.2d 1118, 1154 (S.D. Cal. 2006); *see also National Wildlife Federation*, 128 F.Supp.2d at 1295; *cf. Sierra Club v. Babbitt*, 15 F.Supp.2d 1274, 1282 (S.D. Ala. 1998) (reliance on speculation as to funding from third parties is arbitrary and capricious).

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[166] Draft Plan at p. II.3-290. By way of contrast, the respective mitigation cost estimates for each of the four project alternatives range from $1.35 billion to $3.05 billion. *Id.* Alternative 1 represents the lowest end of that range, whereas Alternative 2 is the most expensive. *Id.*

Here, given the total funding that will be required to implement the wide variety of mitigation programs planned for in the Draft Plan, it is integral to the overall success of the DRECP that the Draft Plan carefully considers and describes the estimated funding. The total mitigation cost estimate for the Preferred Alternative of just over $1.67 billion would need to account for an incredibly broad list of activities to be funded, including among others: (1) land acquisition; (2) endowment for long-term land management and maintenance; (3) habitat restoration and enhancement; (4) monitoring and adaptive management costs; and (5) administrative costs.[167] Further, these activities would be carried out by a wide variety of entities over a lengthy time period.

In order to implement such diverse mitigation, the Draft Plan states that the GCP will be funded through implementation fees and the NCCP will be funded by implementation fees as well as other sources of private and public funding.[168] With respect to private and public funding, the Draft references various funding sources, including, for example, U.S. Fish and Wildlife Service administered programs and funds, federal loan guarantees for multiple species habitat conservation plans, state tax credits for donation of conservation plans, and creation of an endowment.[169] With respect to the implementation fees, however, which will be required for all Covered Activities and will form a backbone of the DRECP's funding structure, the Draft Plan provides virtually no description of, for instance, how such fees will be calculated, how they will be adjusted, or how these fees will be implemented.[170] Rather, the Draft Plan merely asserts that "[t]he Coordination Group will determine the appropriate implementation fee amount for each Covered Activity based on the cost of implementing the DRECP Conservation Management Actions (CMAs) required for the Covered Activity, taking into consideration the estimated costs for implementation discussed [in Section II.3.1.8] and in Appendix I, and any other relevant and reliable cost information available at the time the implementation fee is determined."[171] Aside from such vague, conclusory statements, the Draft Plan provides no other discussion with respect to implementation fees. Lacking any further information, it is impossible to understand precisely how the corresponding wide range of mitigation activities will be funded and, moreover, if they will even be funded at all. That is, without any further discussion as to precisely how the DRECP funds would be accounted for, the Draft Plan relies on pure speculation. Such speculation is insufficient as a matter of law. *See, e.g.*, *Southwest Center for Biological Diversity*, 470 F.Supp.2d at 1154 (overturning U.S. Fish and Wildlife Service's section 10 findings where funding assurances were speculative).

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[167] Draft Plan at pp. II.3-292 to 93; *see also* Appendix I, I.1.

[168] Draft Plan at pp. II.3-290 to 91; *see also* Appendix M, at p. M-15 to 17.

[169] Draft Plan at pp. II.3-293 to 98.

[170] Draft Plan at pp. II.3-291 to 93.

[171] Draft Plan at p. II.3-291.

Such deficiency in the Draft Plan is even more apparent when contrasted to the level of analysis and planning contained in other HCP/NCCP documents. In addition to providing a much more thorough description of the estimated costs of the plan, for example, the Santa Clara Valley Habitat Plan devotes a full 40 pages to describing the manner in which the plan will meet its respective funding requirements.[172] This description includes, among other items, a discussion of various development fees and how they will be calculated, a description of how mitigation fees will be adjusted, if necessary, and an analysis of whether such funding will be sufficient and, if not, how such shortfall will be addressed.[173] The Santa Clara Valley Habitat Plan also includes thirteen tables outlining the various fees and estimated revenues.[174] None of these elements, however, are present in the Draft Plan.

Moreover, the Draft Plan's failure to provide for any contingency in the event of a funding shortfall is particularly glaring. As described above in Section B, for instance, it is unlikely that the Draft Plan would be able to support even the low amount of wind energy that it is planning for under the various alternatives. Specifically, as described above, the Draft Plan has taken insufficient account of a number of factors that should go into planning for the acreage necessary to support wind energy development, including commercial activity, wind resource quality, military, environmental and technical siting conflicts, and the feasibility of developing wind projects on private land near population centers. As a result, the Preferred Alternative would provide for only about one-third the acreage likely to be needed to reach its 3,070-MW planning figure, and therefore wind energy development within the DRECP likely would not be at the level that the Draft Plan estimates. Likewise, given the significant resources imposed by the Draft Plan's overly conservative analysis with respect to eagle take permits, there is a substantial likelihood that renewable energy development will be further limited. Accordingly, because the Draft Plan likely overestimates the amount of wind energy development that will occur, there is a significant risk that a funding shortfall could result, thereby jeopardizing the host of mitigation activities expected to occur throughout the DRECP.

Despite these shortcomings, the Draft Plan fails to even contemplate the likely reality that a funding shortfall will result, and the Plan provides for no contingency in the event that such shortfall actually occurs. Renewable energy projects cannot and should not be expected to shoulder any funding shortfalls; risks associated with uncapped and unpredictable expenses would dissuade any development. Thus, it is entirely unclear how such a situation would be

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[172] Santa Clara County, Final Santa Clara Valley Habitat Plan 9-19 to 59 (Aug. 2012).

[173] Id.

[174] *Id.* at Tables 9-1 to 9-13.

managed and what actions would be taken in such a scenario.[175] This is patently insufficient under the requirements of both the ESA and CESA. *See, e.g., Southwest Center for Biological Diversity*, 470 F.Supp.2d at 1154 (overturning U.S. Fish and Wildlife Service's section 10 findings where funding assurances were speculative); *cf. Sierra Club v. Babbitt*, 15 F.Supp.2d 1274, 1282 (S.D. Ala. 1998) (reliance on speculation as to funding from third parties is arbitrary and capricious).

5. THE PLAN OFFERS LITTLE BENEFIT TO THE WIND INDUSTRY

As described in section 3, above, CalWEA has consistently sought and proposed in the DRECP process a plan that would provide siting flexibility to ensure that the wind energy that proves necessary to achieve the state's greenhouse-gas reduction goals can actually be developed. CalWEA repeatedly communicated that siting flexibility is far more important than any amount of permit streamlining that the plan might be able to offer.

As described in section 2, above, the Draft Plan not only does not provide siting flexibility, it plans for an insufficient amount of wind energy and dramatically reduces the areas in which wind energy can be considered for permitting compared to the status quo. Further, as discussed below, the unduly conservative approach in the proposed eagle permitting framework threatens to further severely limit wind development, and the proposed permitting process for addressing incidental take resulting from development on non-federal lands is completely inadequate.

a. Eagle Permitting[176]

i. The Method For Calculating Eagle Take Is Flawed and Unsupported

(1) *The Draft Plan Relies On An Unsupported Modeling Assumption For the Purpose of Calculating Available Take*.

As provided in Appendix H of the Draft Plan, the Draft Plan calculated the potential available eagle take for projects covered by the DRECP by determining the golden eagle population within the local area population (DRECP plus 140-mile buffer zone) and the annual ongoing golden eagle mortality from all sources in the local area. This ongoing eagle mortality was then subtracted from the 5 percent benchmark for

[175] By contrast, the Santa Clara Valley Habitat Plan provides for various contingencies, such as where land acquisitions fail to keep pace with impacts or development fee funding falls short of expectations. *See id.* at pp. 9-54 to 58.

[176] This section and others are informed by CalWEA Exhibit 3, a technical review of the Draft Plan by Laura Nagy, PhD (DNV GL) and Julia Garvin, PhD (Tetra Tech), which identifies for the REAT Agencies' consideration many additional technical issues of concern relating to the golden eagle and other Covered Species issues.

take.[177] The remaining allowable golden eagle take is 15 eagles across the entire DRECP area.[178]

The Draft Plan claims to rely on Appendix F to the USFWS Eagle Conservation Plan Guidance Material (USFWS 2013a) ("ECP Guidance") to reach the available take figure of 15 golden eagles.[179] However, the Draft Plan[180] relies on a critical assumption that is undermined by the ECP Guidance on which it relies—that eagle density is distributed uniformly across the DRECP local area.[181] As provided in the ECP Guidance, "[t]he potential consequence of this assumption is to over protect eagles in areas of high density and to under protect eagles in areas of low density."[182] As a result, better modeling should be used where available to estimate the eagle population for purposes of calculating available eagle take.[183] Absent use of better modeling, eagle population densities and, thus, available take conclusions are arbitrary and unsupported.

More reliable modeling was available to be used in the Draft Plan for determining the density of the eagle population throughout the DRECP. The Draft Plan provides that the planning area is divided into three Eagle Take Regions for the purpose of distributing available take.[184] If the DRECP can be divided into regions for the purpose of distributing available take, it should be divided into regions to estimate eagle population densities. By doing so, the Draft Plan would avoid the problem articulated in the ECP Guidance, and could also more effectively distribute available eagle take to projects seeking coverage under the DRECP. Similarly, because take data is available for existing projects outside of the DRECP but within the local area, eagle population densities in this area, too, should be capable of more accurate calculation. These data would further inform the take availability for the DRECP since local area/non-DRECP take is subtracted from the available take within the DRECP.[185]

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[177] Draft Plan, Appendix H, Conservation and Management Actions Documentation ("Appendix H"), at p. H-27

[178] Ibid.

[179] Draft Plan Appendix H, at p. H-26.

[180] Draft Plan Appendix H, at p. H-27.

[181] USFWS, Eagle Conservation Plan Guidance, Module 1 – Land-based Wind Energy, version 2, April 2013 ("ECP Guidance"), at p. 81.

[182] Ibid.

[183] Ibid.

[184] Draft Plan Appendix H, at p. H-28.

[185] See Draft Plan Appendix H, at p. H-27

(2) *The Draft Plan Gives Preference to Non-Participants and to Illegal Take.*

As provided in Appendix H of the Draft Plan, the number of golden eagles that could be taken annually within the entire 22.5 million acre DRECP Plan area is 15 eagles.[186] This number is to be adjusted annually and can include: take from all new projects within the DRECP area but which are not necessarily covered by the DRECP; existing projects within a DFA; and also projects not within the DRECP at all but within the local area.[187] What little available take remains would be distributed to new projects within DFAs seeking take coverage under the DRECP.[188] Therefore, participants in the DRECP area can be affected by developers and projects not participating in, and not located within the DRECP area. The Draft Plan does not specify the exact impact this will have on how take under the DRECP will be affected and what permittees can expect.

Also included in the existing and available take calculations is take from unpermitted projects or other unauthorized take. Take from these sources would be subtracted from the available take, with the result that preference is given to illegal take and those seeking permitted take under the DRECP are left with whatever remains. Without some additional clarification, or other means of addressing this issue, the incentive for wind energy projects to proceed under the DRECP is unclear.

(3) *The Draft Plan's Method of Calculating the Weighted Impact of Eagle Take Is Unsupported.*

As provided in Appendix H, eagle take impacts are weighted "based on their respective impacts to an eagle population."[189] Specifically, impacts resulting from the assumed abandonment of a territory will result in a reduction of 4.26 individuals from the Plan Area take cap every year after the first year until the breeding pairs have returned (with the burden of proof resting with the developer). According to the Draft Plan, this number is "consistent with the USFWS ECP Guidance."[190] In fact, the ECP Guidance provides that such an impact should be calculated as a take of 4 individuals.[191] This 0.26 difference is far from inconsequential when only 15 (or so) eagles may be taken (legally or not) each year within the DRECP. Also, given the issues with the Draft Plan's calculation of take and available offsets, set forth below,

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[186] Draft Plan Appendix H, at p. H-28.

[187] Ibid.

[188] Ibid.

[189] Draft Plan Appendix H, at p. H-25.

[190] Ibid.

[191] ECP Guidance at p. 94.

this deviation from the ECP Guidance and escalation of the eagle take valuations further compounds the near impossibility of a wind project receiving permitting under the DRECP at all. The weighted take figures for the DRECP should not deviate from those provided by the USFWS without any explanation.

ii. The BGEPA Permitting Scheme Is Inconsistent with the 2009 Permitting Rule and USFWS Guidance.

Although the Draft Plan acknowledges that "[c]ompensation for the loss of individuals and breeding territories must be sufficient to offset impacts," thereby mirroring the language of the 2009 Rule and the ECP Guidance, it fails to administer the permitting and mitigation scheme in a manner that is consistent with these authorities. The 2009 Rule provides that "projects seeking programmatic permits would need to minimize their own take of golden eagles to the point that it is unavoidable and also reduce take from another source to completely offset any new take from the new activity." Likewise, the ECP Guidance states that "[n]o-net-loss means that unavoidable mortality caused by the permitted activities is offset by compensatory mitigation that reduces another, ongoing form of mortality by an equal or greater amount."

The Draft Plan misapplies these compensatory mitigation requirements. Because the 2009 Rule and ECP Guidance require projects to completely offset any take of golden eagles, thereby resulting in "no-net-loss", take that is authorized by a BGEPA permit under the DRECP should not count against regional take thresholds. The approach to permitting set forth in Appendix H is wholly at odds with this concept, as it requires all take to be counted against thresholds, whether offset or not. As such, any supposed benefits to the BGEPA permitting scheme under the DRECP are illusory.

The Draft Plan's misapplication of the no-net-loss approach to compensatory mitigation further demonstrates that the Plan's 15-eagle limit on take for the entire DRECP is unsupported. In addition to the issues set forth above, the 15-eagle figure does not account for offsets through mitigation and instead appears to assume that no offsets will occur.

We note that in response to CalWEA's position paper interpreting the U.S. Fish and Wildlife Service's 2009 Eagle Permit Rule,[192] the USFWS explained its rationale for concluding that very few, if any, golden eagle take permits will be issued through the DRECP. In particular, until such time as further research can be completed during the initial four years of DRECP implementation, the USFWS will authorize take only subject to a 1% to 5% population limit, regardless of whether any such take is mitigated through compensatory mechanisms. Although the Service has acknowledged that it will consider compensatory mitigation at the regional scale

[192] "CalWEA Position on Eagle Take" (February 13, 2013), transmitted to the REAT and USFWS representatives on the same date.

to ensure no net loss of eagles, it will not provide such credit with respect to local impacts. According to the Service, this is due to the lack of certainty regarding the effectiveness and availability of mitigation opportunities.

Although the Final EA for the 2009 Eagle Permit Rule and Appendix F (v.2) of the Eagle Conservation Plan (ECP) Guidance indicate a need to look at impacts at various geographic scales, neither document suggests that compensatory mitigation should not be considered in determining whether the 1% to 5% threshold is being satisfied. To the contrary, Section 2.5.4 of the EA (page 40) states:

> If we determine that entities proposing future activities have, through advanced conservation practices on existing infrastructure of activities, ensured that there will be no net loss to the breeding population from the combined action and new proposal, they would not be subject to take thresholds and the annual allocation process.

CalWEA understands the USFWS's commitment to managing eagle populations at multiple scales. CalWEA also shares the USFWS's interest in ensuring that eagle management actions are biologically relevant, meet applicable statutory and regulatory standards, and will contribute to the long-term health and viability of eagle populations. However, consistent with our position paper and January 23, 2013 comment letter, we reiterate our concern that the USFWS's approach to eagle permitting in the DRECP is unnecessarily conservative. Further, while the Final Environmental Assessment for the 2009 Rule and the updated version of Appendix F to the ECP Guidance may introduce and demonstrate application of the USFWS's multi-scale approach, neither document provides a rationale for the USFWS's conclusion that local-scale impacts cannot be offset through compensatory mitigation. In fact, CalWEA would question the appropriateness of actually imposing compensatory mitigation on new projects if such mitigation is not counted towards the governing threshold levels.

We understand the USFWS's concern regarding the uncertainty of compensatory mitigation for golden eagle take. We further appreciate the USFWS's considerable efforts to incorporate a short-term eagle permitting program into the DRECP and establishing a research agenda that could support a more comprehensive eagle permitting program in the future. We believe that all parties should recognize, however, that the imposition of a 1% to 5% cap on all take from any source – whether mitigated or not – will make illusory any short-term permit program contained in the DRECP. In the meantime, wind permitting should continue during the early phases of the DRECP implementation, provided adequate data can support the issuance of permits for any given individual project. The proposed withholding of mitigation credit against applicable population thresholds would reduce significantly any incentive for developers to participate in mitigation, whether from a research or implementation perspective. Moreover, the imposition of a desert-wide threshold is, in our view, almost impossible to administer.

In sum, we urge a different approach. Rather than assuming that mitigation effectiveness cannot be quantified, CalWEA asks the USFWS to view the DRECP as an opportunity to tackle these questions.

At its most fundamental, the Draft Plan is not a "conservation" plan for eagles in any sense of the word. Instead of aiming for eagle population stability or recovery, the Draft Plan is little more than a set of extremely limited restrictions on eagle take. These conservative restrictions on take go far beyond any view of the "precautionary principle." These kinds of ultra-conservative and unreasonable restrictions have been set aside as arbitrary and capricious, particularly when there is insufficient evidence to support the restrictions. *See, e.g.*, *Bennett v. Spear*, 520 U.S. 154 (1997) (noting that an objective of the "best scientific and commercial data available" requirement in the ESA is "to avoid needless economic dislocation produced by agency officials zealously but unintelligently pursuing their environmental objectives."); *Arizona Cattle Growers' Ass'n v. U.S. Fish and Wildlife Service*, 273 F.3d 1229 (2001) (holding that USFWS acted in an arbitrary and capricious manner by issuing incidental take statements imposing terms and conditions where there was no evidence that the endangered species existed on the land or no evidence that a take would occur if the permit were issued).

iii. Limiting Take Authorization to the Current DFAs Is Unreasonable.

As provided in Appendix H, golden eagle take authorization under the DRECP is limited to projects located within a DFA.[193] Not only do the DFAs make up an incredibly limited area of the overall DRECP, the DFAs are not reasonably related to the potential avian impacts of wind energy development. Instead, the DFA location constraints on avian-related impacts are, at best, ad hoc and appear to be primarily based on incomplete data. In the absence of better data, avoidance of avian high-risk areas is best achieved through detailed, site-specific studies, as has been outlined in the tiered structure of the USFWS Wind Energy Guidelines and the 2012 Eagle Conservation Plan Technical Appendices. [194]

In addition, in order to implement buffers and other avoidance and minimization techniques, projects need flexibility with respect to siting turbines and other project facilities, a flexibility which is not available under the current DFA structure. To that end, excluding future wind energy development for the life of the Plan based on incomplete data does little to ensure avian

[193] Draft Plan Appendix H, at p. H-43.

[194] In the description of the Preferred Alternative, the Draft Plan also states that federal and state take authorizations won't be available unless a letter from the Siting Clearinghouse is provided. First, it is unclear whether the "letter" refers to results of a project-level Section 358 review or some other process. Secondly, acquiring authorizations, whether for incidental take or military clearance, should be able to proceed on separate but parallel tracks. Doing so will ensure that permitting by one agency is not unduly burdened by the timeframe of acquiring permits or approvals from other agencies.

impacts will be minimized. Instead, take authorization under the DRECP, and any resulting compensatory mitigation and implementation of Advanced Conservation Practices will be unnecessarily constrained.

The Plan should be revised to remove the requirement that projects be located within a DFA, or greatly expand the DFAs, because flexibility in planning and site-specific analysis will more effectively achieve the conservation goals of the DRECP and the alternative energy production goals of the state.

b. The Purported Permit Streamlining Under the DRECP Is Inadequate and Insufficient.

The USFWS has prepared a proposed General Conservation Plan (GCP) to be used as the permitting process to authorize incidental take resulting from Covered Activities on non-federal lands under the DRECP.[195] The GCP is intended to be a programmatic process for "streamlining issuance of ESA section 10(a)(1)(B) permits for impacts to Covered Species" resulting from renewable energy development within certain portions of the Plan area. The implementation structure of the GCP is described in Section 7 of the GCP.[196] This implementation structure makes clear, however, that the process for obtaining incidental take in the Plan area is anything but "streamlined."

For example, pursuant to the GCP permit, applicants must submit a "complete application package" to the USFWS. That package must include: (1) Federal Fish and Wildlife Permit Application Form 3-200-56; (2) $100 application fee; (3) proposed Habitat Conservation Plan; (4) an analysis of the effects to Covered Species of the requested take authorization; and (5) an analysis of the proposed permit issuance under NEPA.[197] In addition to all of this material, the applicant must submit additional information to demonstrate compliance with the terms and conditions of the GCP.

Although the applicant may refer to the appropriate GCP sections of the DRECP and the EIR/EIS for the HCP and NEPA requirements, the applicant nonetheless is still required to prepare a separate, stand-alone HCP and ensure that there is sufficient NEPA clearance for its project, in addition to providing the other materials specified in the GCP. Requiring each project that otherwise should have already been covered under the DRECP to submit a separate, stand-alone HCP and to demonstrate NEPA clearance is not streamlining the process. If anything, it further complicates the process because a permit applicant under the DRECP must satisfy requirements identified in the GCP, in addition to requirements imposed by the ESA and NEPA, before obtaining an incidental take permit for covered activities.

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[195] Draft Plan Appendix M, at p. M-1.

[196] Draft Plan Appendix M, at pp. M-10 to M-32.

[197] Draft Plan Appendix M, p. M-11.

Moreover, in the absence of counties administering the DRECP, permit applicants will be required to submit application materials to the USFWS and the California Department of Fish and Wildlife, which already are experiencing staff shortages and heavy workloads.[198] The GCP does nothing to ensure that permit processing times will be streamlined because it includes no mechanisms to ensure funding to administer the GCP. As the GCP itself explains, "USFWS funding assurances for administering the GCP (i.e., dedication of staff time for application review, participation in the DRECP Coordination Group, etc.) are contingent on annual Congressional budget allocations and are subject to the Antideficiency Act."[199] There is no certainty that these budget allocations will be realized.

6. THE DRAFT PLAN AND THE EIR/EIS CONTAIN OTHER LEGAL DEFECTS.

In addition to the policy and other legal issues identified above, the Draft Plan and the EIR/EIS suffer from a number of additional legal defects. Many of these legal issues are discussed above, but in summary, and as discussed in further detail below, the Draft Plan and the EIR/EIS violate the federal Endangered Species Act, the California Native Communities Conservation Planning Act, the Federal Lands Policy and Management Act, the National Environmental Policy Act, and the California Environmental Quality Act. These respective defects briefly are described in turn.

a. A "General Conservation Plan" Is Not a Legitimate Means of Permitting Take Under ESA Section 10.

Appendix M of the DRECP contains the "Proposed General Conservation Plan" prepared by the USFWS. According to Appendix M, the GCP is intended to serve as "the permitting process to authorize incidental take resulting from Covered Activities on non-Federal lands under the interagency [DRECP]," ostensibly to "streamline" subsequent permitting using separate, stand-alone HCPs – subject to separate NEPA clearance – for actual renewable development projects in the Plan area. As discussed above, CalWEA disputes whether this permitting structure will in fact result in any "streamlining" of the permitting process.

Even if it does create some efficiencies, CalWEA believes that the DRECP is improperly using the vehicle of a General Conservation Plan.

Incidental take authorization for non-federal actions is governed by ESA Section 10. Section 10 requires that an applicant for incidental take authorization submit a habitat conservation plan along with the applicant's incidental take permit application. (§ 10(a)(2)(A).) Section 10 does not mention a "general conservation plan" or any other mechanism for development of a non-

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[198] *See* Letter to USFWS Pacific Southwest Regional Director from Assistant Regional Director of Ecological Services re: Ecological Services Workload Prioritization (issued May 2014).

[199] Draft Plan Appendix M, p. M-17.

applicant driven template conservation plan. Instead, Section 10 continuously refers to "an applicant" who must, among other things: submit a conservation plan (§ 10(a)(2)(A)); minimize and mitigate the impact which is likely to result in a taking (§ 10(a)(2)(A)(ii) & (a)(2)(B)(ii)); and ensure that funding for the conservation plan will be provided (§ 10(a)(2)(B)(iii)). Indeed, the FWS's own "Fact Sheet" on habitat conservation plans ("HCP") under Section 10 provides that,

> [b]ecause *development of a HCP is done by the applicant*, it is considered a private action and, therefore, not subject to public participation or review until the FWS receives an official application. *The FWS is committed to working with HCP applicants* and providing technical assistance as required throughout the HCP development process to accommodate their needs.[200]

Section 10 and the FWS guidance for its implementation unambiguously contemplate that an HCP will not be developed unilaterally by a federal agency, but will be developed by "an applicant" in support of an application for an incidental take permit. Thus, the concept that a general conservation plan *not created by an applicant* may somehow satisfy the requirements for take authorization is in direct conflict with the clear language of Section 10.

b. The USFWS Cannot Satisfy all of the ESA Section 10 Findings Requirements for the Draft Plan.

CalWEA also does not believe that the Draft Plan is legally sufficient to satisfy the strict legal requirements that must be made under Section 10 of the federal ESA, prior to issuance of an incidental take permit. Specifically, section 10(a)(2)(B) of the ESA requires the USFWS to make the following findings before issuing a take permit:

(1) the taking will be incidental;

(2) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;

(3) the applicant will ensure that adequate funding for the plan will be provided;

(4) the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

(5) [any other measures that may be necessary or appropriate for purposes of the habitat conservation plan supporting the permit] will be met;

16 U.S.C. § 1539(a)(2)(B). Here, based on the material provided in the Draft Plan and the EIR/EIS, it is unlikely that the USFWS will be able to find that the applicant will: (1) ensure that

[200] FWS, Habitat Conservation Plans Under the Endangered Species Act, April 2011, page 3, available at http://www.fws.gov/ENDANGERED/what-we-do/hcp-overview.html, emphasis added.

adequate funding for the plan will be provided; and (2) to the maximum extent practicable, minimize and mitigate the impacts of the taking. [201]

First, and as more fully described above in Section 4.b, the Draft Plan fails to provide any substantive description of how the Plan's considerable funding requirements will be satisfied. This is a particularly glaring omission given that the Draft Plan itself estimates the total mitigation costs for the Preferred Alternative to be approximately $1.67 billion.[202] Pursuant to Section 10 requirements, an HCP is required to detail the funding that will be made available to implement a proposed mitigation program. *See* 16 U.S.C. § 1539(a)(2)(B)(iii); *National Wildlife Federation v. Babbitt*, 128 F.Supp.2d 1274, 1294 (E.D. Cal. 2000); *see also Fish And Wildlife Service & National Marine Fisheries Service, Habitat Conservation Planning And Incidental Take Processing Handbook* 3-33 (1996) ("The ESA requires that the HCP detail the funding that will be made available to implement the proposed mitigation program."). Despite such explicit requirements, however, the Draft provides virtually no specific information with respect to how these considerable funding requirements will be satisfied. This is insufficient under the ESA.

Moreover, the fact that the Draft Plan likely overestimates the amount of development that will occur within DFAs makes it difficult, if not impossible, for the USFWS to make the finding that the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of incidental take. 16 U.S.C. § 1539(a)(2)(B)(ii). Broadly, such a finding typically requires that the USFWS consider two factors: (1) the adequacy of the minimization and mitigation program; and (2) whether it is the maximum that can be practically implemented by the applicant. *See Fish And Wildlife Service & National Marine Fisheries Service, Habitat Conservation Planning and Incidental Take Processing Handbook* 7-3 (1996). The Draft Plan's conservation strategy is described in Volume II.3.1.2 (Preferred Alternative, Conservation Strategy).[203] CMAs for Covered Species include avoidance and minimization measures, as well as appropriate compensation ratios required to mitigate the residual effects of take after avoidance and minimization CMAs have been applied.[204] Generally, applicants will provide for this required compensation by paying the above-referenced implementation fees.[205]

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[201] CalWEA reserves its right to raise comments and objections to the USFWS's ability or inability to make findings regarding the other finding requirements in Section 10(a)(2)(B). *See* 16 U.S.C. § 1539(a)(2)(B).

[202] Draft Plan at p. II.3-290. By way of contrast, the respective mitigation cost estimates for each of the four project alternatives range from $1.35 billion to $3.05 billion. *Id*. Alternative 1 represents the lowest end of that range, whereas Alternative 2 is the most expensive. *Id.*

[203] Draft Plan at p. II.3-10.

[204] Draft Plan at pp. II.3-23 to 83 (Avoidance and Minimization CMAs), II.3-83 to 89 (Compensation CMAs); *see also* Draft Plan Appendix M, at p. M-5.

[205] Draft Plan Appendix M, at p. M-5.

Given the likely shortfall in overall funding of the DRECP, however, a substantial portion of this mitigation is likely to never occur. Further, such shortfall will result in not only fewer avoidance and minimization measures but also a lack of compensation CMAs, the function of which are to form part of the DRECP's proportional contribution to Plan-wide conservation and towards achieving the BGOs.[206] Accordingly, any shortfall in funding will directly result in an overall lack of mitigation within the entirety of the DRECP. Given this substantial defect in the Draft Plan, the USFWS will not be able to find that the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of the taking.

c. The CDFW Cannot Satisfy all of the NCCPA Findings Requirements for the Draft Plan.

Similar to those findings required under Section 10 of the ESA, CalWEA does not believe that the CDFW will be able to make all of the required findings under the NCCPA. Pursuant to the NCCPA, the CDFW may approve an NCCP only after making a number of specific findings. These findings include:

(1) The NCCP has been developed consistent with the process identified in the planning agreement entered into pursuant to the NCCPA;

(2) The NCCP integrates adaptive management strategies that are periodically evaluated and modified;

(3) The NCCP provides for the protection of habitat, natural communities, and species diversity on a landscape or ecosystem level through the creation and long-term management of habitat reserves or other measures;

(4) The development of reserve systems and conservation measures in the NCCP plan area provides, as needed for the conservation of the species, a number of requirements related to conserving landscapes, establishing reserves, protecting large enough habitat areas, incorporating a range of environmental gradients, and sustaining effective movement and interchange of organisms between habitats;

(5) The NCCP identifies activities, and any restrictions on those activities, allowed within reserve areas that are compatible with the conservation of species, habitats, natural communities, and their associated ecological functions;

(6) The NCCP contains specific conservation measures that meet the biological needs of covered species and that are based upon the best available scientific information regarding the status of covered species and the impacts of permitted activities on those species;

(7) The NCCP contains a monitoring program;

(8) The NCCP contains an adaptive management program;

[206] Draft Plan at p. II.3-83.

(9) The NCCP includes the estimated timeframe and process by which the reserves or other conservation measures are to be implemented; and

(10) The NCCP contains provisions that ensure adequate funding to carry out the conservation actions identified in the NCCP.

Cal. Fish & G. Code, § 2820. Similar to those issues identified with respect to the Section 10 findings under the federal ESA, CDFW likely will not be able to make the required findings with respect to the NCCP's ability to: (1) ensure adequate funding to carry out the conservation actions identified in the NCCP; and (2) provide for the protection of habitat through the creation and long-term management of habitat reserves or other measures to provide equivalent conservation of Covered Species.[207]

First, as stated in Appendix N to the Draft Plan, the NCCP's description and analysis of funding assurances is identical to that under the ESA.[208] As the NCCPA contains a similar requirement to the ESA regarding the required analysis of funding prior to issuance of any take permit, such funding description likewise is insufficient under the NCCPA. *See, e.g., Environmental Council of Sacramento v. City of Sacramento*, 142 Cal.App.4th 1018, 1044 (2006).

Second, again for similar reasons, CDFW will not be able to find that the NCCP will provide for the protection of habitat through the creation and long-term management of habitat reserves or other measures to provide equivalent conservation of Covered Species. Again, given the likely result that less development than presently predicted will occur within the DRECP, a lack of implementation fees will result in insufficient funding of the described conservation measures. Accordingly, for reasons similar to those identified with respect to the federal ESA, the CDFW will not be able to make its required findings under the NCCPA that the NCCP will provide for these protections.

Further, the NCCPA also requires the creation of an implementation agreement that contains, among other items, "[p]rovisions to ensure that implementation of mitigation and conservation measures on a plan basis is roughly proportional in time and extent to the impact on habitat or covered species authorized under the plan." Cal. Fish & G. Code, § 2820(b)(9); *see also id.* § 2820(b)(3)(B) (allowing suspension or revocation of permit where participant fails to maintain rough proportionality between impact on habitat or covered species and conservation measures). In furtherance of this requirement, the Draft Implementing Agreement for the DRECP states that the agencies "will ensure that the assembly of the NCCP Reserve and implementation of CMAs

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[207] As with its arguments with respect to the ESA, CalWEA reserves its right to raise comments and objections to the CDFW's ability or inability to make findings regarding the other finding requirements in Fish & Game Code Section 2820.

[208] Draft Plan Appendix N, at p. N1-3 (referencing section II.3.1.8 of the Draft's discussion of the Preferred Alternative, which pertains to "Cost and Funding").

'stays even' with Permittee impacts."[209] Likewise, Appendix N2 of the Draft also analyzes the respective proportionality estimates.[210] CalWEA has analyzed these respective documents, however, and believes that they do not come close to meeting NCCPA requirements. In particular, without considerably more financial analysis, CalWEA believes that the Draft cannot draw any reliable conclusions with respect to the ability of the DRECP to meet these significant mitigation requirements.

d. The DRECP Violates FLPMA

For many of the same reasons as noted above, CalWEA likewise believes that the Draft Plan violates FLPMA, as the Draft is in plain conflict with many of the criteria that must be used to guide BLM's land use plans. Specifically, pursuant to Section 202 of FLPMA, in the development and revision of land use plans, the BLM must:

(1) use and observe the principles of multiple use and sustained yield set forth in this and other applicable law;

(2) use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences;

(3) give priority to the designation and protection of areas of critical environmental concern;

(4) rely, to the extent that is available, on the inventory of the public lands, their resources, and other values;

(5) consider present and potential uses of the public lands;

(6) consider the relative scarcity of the values involved and the availability of alternative means (including recycling) and sites for realization of those values;

(7) weigh long-term benefits to the public against short-term benefits;

(8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans; and

(9) to the extent consistent with the laws governing the administration of public lands, coordinate the land use inventory, planning, and management activities of or for such lands with [other federal, state, local, and tribal land use plans].

43 U.S.C. § 1712(c). Here, based on the language of the Draft Plan, and as demonstrated throughout these comments, BLM's proposed land use amendment fails, among other things, to: (1) use and preserve the principles of sustained yield; (2) consider present and potential uses of the public lands; (3) consider the relative scarcity of the values involved and the availability of

[209] Draft Implementing Agreement at pp. 10-11.

[210] Draft Plan Appendix N2.

alternative means; (4) weigh long-term benefits to the public against short-term benefits; (5) provide for compliance with applicable pollution control laws; and (6) coordinate with state and local land use planning.

More specifically, among other problems, the Draft Plan's failure to fully account for California's stated greenhouse gas reduction goals, including the consistency of BLM's proposed land use planning with such goals, clearly conflicts with BLM's required land planning criteria – in particular, the requirement that the BLM consider potential future uses of the public lands, provide for compliance with pollution control laws, and consider consistency with state and local land use plans. 43 U.S.C. § 1712(c)(5), (8), (9). Further, the Draft's stated hard prohibition on development outside of the established DFAs on BLM land, notwithstanding the fundamental role that such non-DFA lands could play in achieving California's greenhouse gas reduction goals, reflects a failure to consider the relative scarcity of the state's limited, high quality wind resources, as well as a failure to weigh the long-term benefits of all land planning decisions. 43 U.S.C. § 1712(c)(6)-(7). In short, the Draft Plan's failure to sufficiently account for long-term planning needs violates basic premises of how the nation's public lands are to be managed.

e. The Draft EIR/EIS Violates CEQA and NEPA

As discussed above, CalWEA believes that the Draft EIR/EIS violates both CEQA and NEPA, and the Draft EIR/EIS should be revised and recirculated for an additional round of public review and comment. For example:

- **The Project Definition and Overall Scope of the EIR/EIS Is Inadequate**: The description of the project in an EIR/EIS must contain sufficient specific information about the project to allow a complete evaluation and review of its environmental impacts. (Cal. Code Regs., tit. 14 ("CEQA Guidelines"), § 15124.) CEQA and NEPA require that all reasonably foreseeable elements of an overall project or plan be included in the environmental analysis for that project or plan. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 396 (1988); see also CEQA Guidelines, § 15126; 40 C.F.R. §§ 1508.25(a), 1502.4(a).) The Draft Plan EIR/EIS fails to include an analysis of reasonably foreseeable renewable energy needs to meet the 2050 goals, and an analysis of the environmental impacts associated with efforts to meet those needs. Because the doubling of renewable energy between 2040 and 2050 was not treated as part of the project, and included in the environmental analysis, the EIR/EIS is deficient under CEQA and NEPA.
- **The EIR/EIS Does Not Include a Reasonable Range of Alternatives**: An EIR/EIS must evaluate a reasonable range of alternatives to the project. (Cal. Pub. Resources Code, §§ 21002, 21002.1(a), 21100(b)(4), 21150; *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 405 (1988); 42 U.S.C. § 4332(2)(C)(iii), (E); *Vermont Yankee Nuclear Power Corp. v. Nat. Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978).) Despite this requirement, the Draft Plan arbitrarily rejected CalWEA's

proposed alternative to wind development under the DRECP. As detailed above, this proposed alternative would meet most of the Plan's basic objectives/purpose and need, but could also lessen the significant environmental effects of the Plan. As such, the rejection of the alternative without detailed analysis is unsupported, and the Draft Plan and the EIR/EIS do not rely on a "reasonable range of alternatives" in violation of NEPA and CEQA.

- **The EIR/EIS Improperly Defers Analysis and Mitigation of Impacts Related to 2050 Reduction Targets**: An EIR/EIS must not defer the analysis of any reasonably certain and foreseeable project actions and impacts. (*Envt'l Protection Info. Ctr. v. Dept. of Forestry & Fire Prot.*, 44 Cal.4th 459, 503 (2008); 40 C.F.R. § 1508.25(a)(1); *Thomas v. Peterson*, 753 F.2d 754 (9th Cir. 1985).) Likewise, the EIR/EIS must not defer the formulation of specific mitigation measures. (CEQA Guidelines, § 15126.4(a)(1)(B); *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 307 (1988); *Neighbors of Cuddy Mtn. v. U.S. Forest Serv.*, 137 F.3d 1372 (9th Cir. 1998).) As discussed above, it is likely that additional lands must be made available for development to support 2040 GHG-reduction targets, let alone 2050 reduction targets, but the Draft Plan and EIR/EIS do not discuss these reasonably foreseeable implications of the proposed prohibitions on renewable energy development outside of DFAs. Both the deferral of a project's environmental analysis of impacts and the deferral of mitigation designed to address those impacts violates NEPA and CEQA.
- **The EIR/EIS Fails to Analyze and Mitigate the Cumulative Effects of the Draft Plan**: CEQA and NEPA require an analysis of cumulative impacts resulting from the incremental effect of a project when added to other past, present, and reasonable future projects. (CEQA Guidelines, §§ 15065(a)(3), 15130(b)(1)(A), 15355(b); 40 C.F.R. § 1508.7.) By ignoring the plainly foreseeable additional amount of renewable energy that will be needed to meet GHG-reduction goals, the EIR/EIS fails to adequately consider the cumulative impacts of the Draft Plan under both CEQA and NEPA. Likewise, because the EIR/EIS fails to analyze the cumulative impacts of the Draft Plan, the EIR/EIS does not include feasible mitigation measures necessary to reduce any significant cumulative environmental effects. (Cal. Pub. Resources Code, §§ 21002, 21002.1(a), 21100(b)(3), 21151; CEQA Guidelines, § 15126.4; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352, 371 (1989) [NEPA requires discussion of mitigation measures to allow proper evaluation of project's adverse effects].) Therefore, the analysis of cumulative impacts in the EIR/EIS is deficient under CEQA and NEPA.
- **The EIR/EIS Does Not Adequately Analyze Potential Impacts to Terrestrial Species**: An EIR/EIS must identify and describe all potentially significant direct environmental impacts that may result from a project in both the short term and the long term. (CEQA Guidelines, § 15126.2(a); 40 C.F.R. § 1508.27(b)(1).) The Draft Plan's terrestrial operational impact analysis for Covered Activities does not accurately estimate potential

impacts from wind energy development under the DRECP. Had a proper evaluation been done—to include an evaluation of impacts from each type of renewable development—it is reasonable to expect that wind energy projects would be found to have fewer wildlife and habitat impacts than other types of development, and that such impacts could be sufficiently low to justify wind development in broader areas. The failure to adequately evaluate potential impacts to terrestrial species from all types of potential development is a violation of CEQA and NEPA.

- **The EIR/EIS Fails to Demonstrate That Mitigation Will Be Adequately Funded and Effective**: Where a project assumes that required funding for a mitigation plan will be available, and that assumption is shown to be unsupported, the significant environmental effects of a project have not been effectively mitigated as required by CEQA and NEPA. (*Anderson First Coalition v. City of Anderson*, 130 Cal.App.4th 1173, 1187 (2005) [ineffective mitigation plan violates CEQA]; see 40 C.F.R. § 1502.9(c) [concerning substantial changes relevant to environmental effects][211].) For the Draft Plan, the total mitigation cost estimate for the Preferred Alternative is just over $1.67 billion. However, the Plan does not provide sufficient detail concerning how the funds will be made available and relies on vague, conclusory statements and speculation about future actions. This is insufficient under CEQA and NEPA to establish that mitigation will be effective.

7. CONCLUSION

As discussed above, the environmental analysis of the Draft Plan is deficient because, among other things, it fails to properly consider a reasonable range of alternatives, impermissibly defers the analysis and mitigation of environmental impacts, and fails to properly consider the cumulative effects associated with the DRECP. Further, the Draft Plan requires a reanalysis of the amount of GHG reductions that will be required from the electricity sector to achieve California's climate change goals; this analysis should be informed by a rigorous multi-sector analysis of the technical feasibility and cost of achieving California's goals and, in particular, what will be required of the electricity sector in order to maintain electric-grid reliability and affordable utility rates. The Draft Plan must properly analyze local land use policies and practices as pertains to the development of utility-scale renewable energy projects and develop realistic assessments of where such development is likely to occur. Finally, the Draft Plan must demonstrate how the plan will be funded and provide for contingencies in the event of a funding shortfall.

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[211] See CEQ Guidance, Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact (2011), page 9, available at http://energy.gov/nepa/downloads/appropriate-use-mitigation-and-monitoring-and-clarifying-appropriate-use-mitigated [citing 40 C.F.R. § 1502.9(c), availability of funding for mitigation commitment is essential to adequacy of NEPA document].)

All of these legal and analytical defects require wholesale reconsideration and recirculation of the Draft Plan and the EIR/EIS. In the alternative, the agencies should adopt the "No Action Alternative."

Sincerely,

R. Clark Morrison

CalWEA Exhibit 1:
Geospatial Analyses Performed by CalWEA

All geospatial analyses referenced in CalWEA's comment letter were performed using ArcGIS for Desktop version 10.2.1. Generally, publicly available shapefiles provided to DRECP stakeholders via the drecp.org website were used for calculations and overlap analyses of Development Focus Areas.

When analyses called for screening by detailed attributes (e.g., public versus private lands, conservation designations), calculations were performed using a geodatabase provided to CalWEA via email from Scott Flint (Energy Commission) on October 13, 2014.

Overlap calculations of Department of Defense areas of concern were informed by layers obtained from the DRECP DataBasin Gateway, a digitized approximation by CalWEA of the High Risk of Adverse Impact Zone, and the mapped results of a Section 358 request initiated by CalWEA to the Siting Clearinghouse.

The following tables provide details supporting the figures used in CalWEA's comment letter.

Table Ex-1: Overlap of CalWEA Priority Wind Resource Area Tiers with Preferred Alternative and Alternative 2.

Priority Tiers	Acreage	Preferred Alt DFA Overlap	% Overlap Preferred Alt DFA (DRECP/Tier)	Alternative 2 DFA Overlap	% Overlap Alt 2 DFA (DRECP/Tier)
Tier 1E	83,743	34,274	41%	35,866	43%
Tier 1P	773,026	62,833	8%	136,056	18%
Tier 2	432,410	77,225	18%	84,774	20%
Tier 3	2,141,665	210,644	10%	386,423	18%
TOTALS	**3,430,845**	**384,977**	**11%**	**643,119**	**19%**

"Commercially Viable" Tiers	Acreage	Preferred Alt DFA Overlap	% Overlap Preferred Alt DFA (DRECP/Tier)	Alternative 2 DFA Overlap	% Overlap Alt 2 DFA (DRECP/Tier)
Tier 1P	773,026	62,833	8%	136,056	18%
Tier 2	432,410	77,225	18%	84,774	20%
TOTALS	**1,205,436**	**140,059**	**12%**	**220,830**	**18%**

Table Ex-2: Overlap of CalWEA Priority Wind Resource Area and BLM LUPA Designation Lands with Conservation Priority Tag

Category	Acreage	Overlap w CalWEA Tiers 1-3 Acreage	% of CalWEA Tiers 1-3	CalWEA Tiers 1-3 on BLM-Owned Land Preferred Alt Acreage	% of CalWEA Tiers 1-3 on BLM Land	Conservation Priority Areas on BLM-Owned Land with LUPA Designations	% of BLM-Owned Land with Proposed LUPA Designations
BLM-Owned Lands with Proposed LUPA Designations	8,356,058	2,656,521	77%	2,131,673	80%	1,703,230	20%

Table Ex-3: Overlap of CalWEA Priority Wind Resource Area and BLM LUPA Designation Lands with Conservation Priority Tag

	Acreage	Overlap w CalWEA Tiers 1-3 Acreage	% of CalWEA Tiers 1-3
BLM-Owned Lands with Proposed LUPA Designations and Categorized as Conservation Priority Areas	1,703,230	794,373	47%

Table Ex-4: Overlap of DoD HRAIZ, Sec. 358 and Other Concerns

DRECP Alternative	Acreage	Overlap w DoD Red + HRAIZ + Sec 358 Concern	Percent of Alternative	Overlap w DoD Red + HRAIZ + Sec 358 + Yellow Concern	% Overlap w DoD Red + HRAIZ + Sec 358 + Yellow Concern
Preferred Alternative	2,023,995	472,801	23%	1,324,826	65%
Alternative 2	2,472,808	793,912	32%	1,721,384	70%

CalWEA Exhibit 2:
The Golden Sun Wind Project

The experience of the proposed Golden Sun wind project illustrates the reasonableness of preserving areas for wind energy exploration and site-specific conflict evaluation, as CalWEA has consistently proposed throughout the DRECP process. Under the Draft Plan, however, wind projects would be categorically prohibited across vast areas of the desert, even where actual investigation of much smaller specific areas demonstrate very little conflict. This is the case with Golden Sun.

Golden Sun is a medium-scale (70 MW) proposed project in northern Imperial County along the Riverside County border on a land parcel adjoining the Chocolate Mountain Gunnery Range.[212] A transmission line runs through the center of the project area, as does a maintained county road. Under current BLM policy, wind development is currently an allowable use in the area, which is designated as Multiple Use Class – Limited, assuming NEPA requirements are met. Because the project area is also located within the Chuckwalla Desert Wildlife Management Area (DWMA), it is also subject to a 1% surface disturbance limit within the DWMA, equating to 8,200 acres,[213] to protect the desert tortoise. As wind projects have limited footprints (less than 1.5 acres/MW in this case), Golden Sun would have construction impacts of approximately 150 acres and permanent impacts of approximately 75 acres, which would be addressed with mitigation measures. Thus, the project would be well within the current disturbance limit for the area, leaving over 97% of the disturbance cap acreage available for other potential uses to support BLM's multiple-use mandate under FLPMA.

Under the Draft DRECP, the entire existing Chuckwalla Desert Wildlife Management Area (DWMA) – covering approximately 500,000 acres – would be placed off-limits to wind energy development, as would additional areas proposed to be added to the area. The Draft Plan lists some 50 special-status species existing within the DWMA.[214] In response to the developer's project application, BLM identified a limited number of these species as potential conflicts in the project area, along with other potential conflicts. The major potential conflicts – and the results of the site-specific evaluation of those conflicts – are as follows:

- **Golden eagle –** Golden eagle surveys found no Golden eagles or occupied golden eagle nests within a 10-mile buffer area around the project or within the project area. The closest nest was over two miles to the north of the site. (The Draft Plan includes a one-mile buffer area around eagle nests).
- **Military flight path –** One of the most serious concerns initially raised by the BLM was that the proposed project is within the flight path of the Chocolate Mountain Aerial Gunnery range. However, the developer resolved the conflict by working with the Navy to develop a project layout that avoids any impacts to the flight paths. Additionally, the

[212] The range is used by the U.S. Navy and Marines for aerial bombing and live-fire aerial gunnery practice.

[213] The DWMA covers 820,077 acres, 1% of that is 8,200 acres.

[214] Appendix_L_BLM_Worksheets-ACEC_Part5_10 – Chuckwalla.

FAA completed aeronautical studies of the proposed turbine locations and issued Determination of No Hazard Letters in December 2012.

- **Mojave Desert Tortoise –** Prior to the developer proposing a project, an estimate of Mojave Desert Tortoise density for the project area did not exist, as BLM had conducted very little monitoring of the area, and thus BLM put it in the "unknown" category. The developer conducted a survey of 4,671 acres in the spring of 2014 which resulted in a density estimate of 3.6 tortoises per km.^{2} This estimate is slightly lower than recent US Fish and Wildlife Service estimates made for the larger Chuckwalla area which yielded results showing a low population density of 3.9 tortoises/km^2 in 2011 and 2012. In addition to finding a slightly lower population density, the survey found that the tortoises were heterogeneously distributed (lower in some areas and higher in others) and there is the possibility to design the project to minimize project impacts by taking this distribution into account.
- **Vegetation** – A survey of rare plant species showed most species had limited distribution throughout the study area. The ability of wind projects to be carefully micro-sited will enable the developer to work with BLM to ensure that the project layout avoids these plants to the maximum extent practicable. One plant listed as rare was found to be so abundant (over 1 million plants were estimated to be in the project area) as to warrant changing the plant's classification along with proportionate changes and reductions in mitigation requirements.

Additionally: no objections have been raised by local tribes; the project will not require a new access road, as the project would use an existing county road maintained by Imperial and Riverside Counties; there is a general lack of substantial archaeological deposits in the proposed project area in comparison with many other desert regions; and viewshed impacts are limited (turbines will be in the foreground or middle ground viewshed – 5 miles distance – from only 13% of the Little Chuckwalla Mountains Wilderness Area in the southernmost part of the area, most of which overlooks a viewshed already impacted by the existing transmission line, the Navy's Chocolate Mountain gunnery and a graded public roadway).

Unfortunately, the BLM has recently informed Golden Sun's developer that it has "elected to postpone any action regarding the Golden Sun Wind project" until after the issuance of the Record of Decision for the DRECP, the timing of which is not certain. As the DRECP would prohibit development in this area, if adopted, the project would be dead, despite the lack of any significant conflicts. Instead, this project should serve as a model for how the DRECP should be re-envisioned: as a flexible plan that enables site-specific evaluation of potential conflicts in areas of high wind resource quality and permits the development of wind projects where conflicts can be avoided or reduced to acceptable levels.

CalWEA Exhibit 3:
DNV GL / Tetra Tech Memo

Final Memo

To:	Nancy Rader, Ashley Richmond, Clark Morrison, CalWEA
From:	Laura Nagy, PhD, DNV GL; Julia Garvin, PhD, Tetra Tech
Date:	February 20, 2015
Re:	Review of Draft DRECP

This document is a review of the September 2014 Draft Desert Renewable Energy Conservation Plan (DRECP; Draft) as it pertains to golden eagles, and, to a lesser extent, other Covered Species. Given the extensive nature of the Draft and the budget available, this review is not comprehensive, but highlights overarching concerns for the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). In addition, we provide a subset of specific questions which are grouped into general subject areas. Overall, we believe that the lack of clarity and details in the Draft should result in a recirculation to allow additional public comment prior to the finalization of the DRECP.

1 Overarching Comments for the USFWS and CDFW Regarding Eagles

1.1 Lack of Clarity of How Eagles Will Be Managed Short and Long-term

The Draft identified that, in the short-term, the DRECP will be the primary permitting and conservation framework for golden eagles in the plan area. However, in the long-term, the USFWS will craft a vision of conserving eagles in the desert at a broader, more meaningful scale. Based on this information, it is unclear how and by whom golden eagle populations will be managed in the short- and long-term.

1.2 Lack of Sufficient Detail to be Considered an Eagle Conservation Plan

The framework provided by the current Draft does not provide sufficient detail to be considered an Eagle Conservation Plan. Specifically, there are insufficient details as to how mitigation, adaptive management, and population monitoring would be implemented on a project-by-project basis, or implemented plan-wide. A similar lack of detail for these components in an individual project's Eagle Conservation Plan and take permit application would likely merit rejection of the permit application by the USFWS. Without sufficient detail of how eagle populations will be managed, it is unclear how the DRECP be implemented.

1.3 Lack of Sufficient Detail to Evaluate Analysis and Impacts of the DRECP

Within Appendix H of the Draft, there are multiple places where the details required to evaluate the analysis and impacts are absent, and these details need to be presented to the public prior to

generating the final DRECP so that they can be appropriately evaluated. Examples include, but are not limited to the following:

- How the annual golden eagle take estimate of ongoing mortality was calculated (Table H-1; see Section 1.8 below);
- How the allowable take limit will be evaluated annually (see Section 1.8 below);
- How the population size of golden eagles in the DRECP area will be defined and evaluated
- What the golden eagle research program is and what it will entail (Appendix H, pg H-30);
- What is the cost of the required contribution to the plan-wide golden eagle monitoring program, how will the money will be used (see Section 1.4 below), and whether the conservation goals of the Draft will be achieved;
- Will projects on private lands need to do additional National Environmental Policy Act (NEPA) analyses or are projects on private lands covered as part of the "GCP application" (Appendix H, Pg H-44); and
- How was the limitation of no more than 20% of suitable foraging habitat within a 4-mile buffer of an active nest developed (Appendix R2, pg R2-7-4)? How is foraging habitat regulated under the Bald and Golden Eagle Protection Act (BGEPA)?

1.4 Unclear Cost Requirements

The Draft identifies financial commitments (i.e., DRECP management funds or compensatory mitigation) or actions (i.e., surveys or implementation of adaptive management) from developers and operators throughout its text without providing details with respect to 1) the cost, 2) if the costs are capped, 3) how the funds will be used, or 4) who will allocate the funds. Examples include, but are not limited to, the following:

- Appendix H, pg H-32. A project developer or operator will be expected to implement any reasonable avoidance and minimization measures that may reduce take of eagles at a project.
- Appendix H, pg H-44. Applicant will be required to contribute to a plan-wide golden eagle monitoring program.
- Appendix H, pg H-44. Pay fees for a share of the costs to administer the plan and implement the Adaptive Management Program.
- Appendix I, pg I-35. Units are missing where costs are provided. Are these costs per year? Per project?

1.5 Significant Commitments of Agencies' Time for Agencies that Are Understaffed to Meet Current Demands

Throughout Appendix H, there are multiple statements of elements that will be reviewed, studied, or evaluated that will require substantial commitment of staff time from the wildlife agencies, including the USFWS. To date, Region 8 of the USFWS has identified that they cannot meet their existing responsibilities and have had to prioritize among them. Please provide a detailed

explanation of how agencies will be funded and staff time allocated to do the following duties, as identified in the Draft:

- Review and authorize permits;
- Annual review of golden eagle population size and allowable take;
- Annual assessment of golden eagle research priorities;
- 5-year review of all permits; and
- 5-year reevaluation of golden eagle conservation approach.

1.6 Different Definitions of Abandoned Territories Throughout the Draft Have Ramifications for Compensatory Mitigation

The Draft's interpretation of territory loss is contradictory and needs to be resolved prior to the final DRECP because of the compensatory mitigation requirements associated with an abandoned territory (take of 4.26 golden eagles per year). In Appendix H, on page H-34, the Draft defines an abandoned territory as "if no adult eagles have been seen occupying any part of a nest cluster (i.e., a presumed territory) or working on a nest (e.g., repairing, adorning, or building) the territory can be declared abandoned. All nests within the territory must be assessed as being inactive during that 7-year period, to declare the territory abandoned." However, on pg H-25, the Draft states that developers will mitigate for abandoned territories "until data show the number of breeding pairs has returned to the original number of territories occupied in the DRECP, or until it can be demonstrated that the predicted loss of that territory has not occurred." Territory abandonment is a challenging metric to evaluate because 1) eagles have multiple nests within their territories, 2) eagles regularly have years when no breeding is attempted, and 3) isolating the cause of nest failure/disturbance is rarely possible on a project-by-project basis. Greater clarity is needed to understand how a single definition of territory abandonment will be applied in a biologically appropriate context so that developers understand when compensatory mitigation is triggered.

1.7 Implication of Eagles to Development Is Unclear

Appendix H states that only projects within a Development Focus Area (DFA) can seek take coverage for eagles under the DRECP. However, it is not clear how this will be implemented with respect to 1) projects that exist both within and outside of a DFA, 2) project expansions if all or part extends outside of a DFA, and 3) repower projects. The Draft states on page H-20 that "the USFWS will likely be able to provide more flexibility and to identify areas on which to focus eagle conservation and areas most appropriate for development." However, the Draft does not provide additional details. Thus, in order for the wind industry to assess the feasibility of the Draft with respect to existing and future wind development, can you please explain 1) how projects are impacted when not fully enclosed within a DFA and 2) what types of information would result in the USFWS altering the areas for development and what this process would look like?

1.8 Details on the Calculation of Allowable Take and How Allowable Take Will Vary Among Years Are Missing

The management approach of the DRECP with respect to eagles is largely based on the annual allowable take value, which has been set at 15 golden eagles per year. However, the details behind that calculation, such as how the existing annual take was derived, are not provided, making it impossible to evaluate the appropriateness of the calculation and associated management approach. Similarly, in Appendix H, on page H-28, the Draft states that the take number in the DRECP can go up or down annually based on the golden eagle population status, so it is clearly an important metric to those developing renewable energy facilities in the DRECP area. Although the USFWS 2009 Eagle Rule Final Environmental Assessment identified how the local area population (LAP) size should be estimated to determine the initial take value, the Draft does not explain how the LAP size will be estimated to evaluate the annual take value. This information is essential to understanding how the DRECP would be implemented, particularly in years when method changes may occur, which then result in changes in population size being confounded with changes in methods. Although agency staff has since provided verbal responses on this topic, clarity should be provided within the Draft, including the approach to estimating annual take at projects with and without fatality monitoring, so that the appropriateness of the allowable take analysis can be evaluated.

1.9 Allowable Take for an Individual Project within a Year Could Exceed the Allowable Take Per Eagle Region

Given that 1) allowable take has been set at 15 eagles for the DRECP area annually, 2) the DRECP area will be divided into three eagle regions, 3) no project may exceed 40% of the total take cap in the region, 4) abandonment of a nest is equated with take of 4.26 eagles per year, then it appears that there are many scenarios in which a single project could violate the identified limit of authorized take within an eagle region. For example, five projects in DRECP Region 1 could take 1 eagle each (5 eagles total), one project in DRECP Region 2 could take a nest (4.26 eagles total), and two projects in DRECP Region 3 could take 2 and 2.5 eagles per year, respectively (4.5 eagles total). In this scenario, the regional cap is reached for all three regions, and the plan-wide cap is also reached leaving no additional take available for that year. Please provide details on how potential overages of take would be managed (page H-28). Similarly, the Draft is not clear what will happen if the allowable take number in a given year drops below the actual take number.

1.10 Projects Outside the Plan Area will affect the Available Take within the Plan Area

The allowable take value of 15 golden eagles is specific to the DRECP area and a surrounding 140-mile buffer. Therefore, take from projects outside of the plan area but within a distance of 280 miles may reduce the available take within the plan area. As a result, participants in the DRECP can be affected by developers and operators not participating in the DRECP, as well as by take not related to DRECP Covered Activities, if they are taking eagles. The current Draft does not clearly convey these limitations on the available take.

2 Specific Questions/Comments Regarding Eagles

2.1 Estimating Take

- How does USFWS intend to translate the output of the Bayesian model into actual take values? For example, if a project had an anticipated take level of 0.5 eagles per year, would this be subtracted from the 15 eagles per year threshold as 0.5 eagles or rounded up as 1 eagle?
- Please explain whether take numbers will be evaluated based on golden eagles found or an estimated/adjusted number based on corrections from bias trials and statistical analysis. Verbal communications with USFWS staff involved in the DRECP have indicated that numbers of eagles found will likely be used to determine whether adaptive management steps are triggered or take thresholds have been exceeded; however, this information should be clearly presented within the Draft.
- The Draft states "Currently (2013), the number of golden eagles that could be taken in the DRECP area would be 15; however, the number is to be calculated annually and will go up or down depending on factors such as implementation of projects that take golden eagles inside or outside the DRECP area and the population status of golden eagles" (Appendix H, pg H-20). CalWEA has concerns about the annual calculations. First, under current conditions USFWS has identified that within Region 8 that they do not have the staff to execute their existing workload; therefore, they are prioritizing projects. Second, the Draft does not explicitly explain how populations will be evaluated. Third, the Draft does not explicitly state how eagle fatalities will be identified (i.e. does this value could actual vs. estimated fatalities). Therefore, CalWEA would like to see details regarding the following: 1) How will this be prioritized in USFWS' workload? 2) How will population size be calculated? 3) How will the number of eagle fatalities be identified? And 4) if the population size drops below the level required to sustain existing take, what actions will be required?

2.2 Permitting Authority and Regulatory Requirements

- The Draft states that "the USFWS will likely be able to provide more flexibility and to identify areas on which to focus eagle conservation and areas most appropriate for development" (Appendix H, pg H-20). Can you please explain what this process would look like and what types of information would result in this type of decision being made? Given the proposed restrictions on wind development outside of the identified DFAs, particularly on public lands, what additional flexibility does USFWS foresee?
- What kind of regulatory implications are there for eagle habitat loss? Habitat loss is not addressed in BGEPA, which only directly identifies mortality and disturbance.
- The mitigation standard is unclear for take at existing projects. Appendix H, pg 28 of the Draft states, "When an existing project seeks coverage under the DRECP, we will evaluate whether our initial project level take estimate under the LAP analysis, would be exceeded." However, without specific information regarding how this was applied to existing projects,

it is impossible to evaluate. Please provide additional data to clarify how this calculation was generated.

- Please provide information on what permitting avenues are available to existing projects that are denied a permit under the DRECP because the allowable take threshold has been reached?

2.3 Allowable Take

- Appendix H, pg H-27, Table H-1. Please provide detail on how the "annual estimate of mortality from all sources" was calculated. Clarity should be provided within the Draft, including the approach to estimating annual take at projects with and without fatality monitoring, so that the appropriateness of the allowable take analysis can be evaluated.
- Appendix H, pg H-27. The Draft states, "For existing projects with no eagle mortality data on record, we estimated annual mortality based on information from other wind facilities or utility lines in similar habitat types." This statement does not provide the level of detail required to understand where the minimum of 69 ongoing eagle mortalities annually occur (pg H-35). Please provide additional detail to clarify how this calculation was generated and whether and how project-specific or location-specific characteristics that may affect take were taken into account.
- Appendix H states that USFWS plans to re-evaluate take levels annually. The details of how take will be evaluated and when it will be applied to the take threshold is missing from the Draft.
- Appendix H, pg H-28 references that since anticipated take from most existing and recently approved renewable energy projects were taken into consideration in the LAP cumulative effects analysis, these projects may not be subject to the DRECP take cap for eagles based on if the initial project level take estimate under the LAP analysis, would be exceeded. Given that details as to how take was calculated for existing and recently approved projects are not provided in the current Draft, developers and operators are unable to determine whether the take cap applies to their projects or not. Similarly, the mitigation standards for these types of projects are also unclear with respect to eagles.

2.4 Research and Advanced Conservation Practices

- Appendix H, pg H-30. The Draft states, "The Wildlife Agencies are in the process of developing a research program that includes a prioritized research list, potential partners, schedule, related ongoing research, and budget estimates." Please provide additional details.
- Appendix H, pg H-31 references Advanced Conservation Practices. Given other guidance provided by USFWS on eagle projects and the absence of scientifically proven methods, CalWEA proposes that the recommendations be more appropriately termed "Experimental Advanced Conservation Practices"
- Appendix H, Table H-2. It is unclear if this table was meant to be applied if a project is within its allowable take limit or if ACPs are to be applied if a project has a trajectory that

implies it will exceed its take allowance. CalWEA believes that if a project is within its allowable take limit, then the ACPs listed in this table are beyond what the BGEPA requires.

- Appendix H, pg H-46. The Draft states that the USGS is leading a research effort that began in 2013, but that the details are not available. Given that this research was initiated in 2013, please provide the details about the specific study goals, objectives, and methods and what USGS has found, to date.
- Appendix H, pg H-48. The Draft states that "Until such time as the population-level monitoring indicates the eagle population is stable or increasing, and can accommodate ongoing take from Covered Activities as well as other non-covered activities, monitoring of project-level impacts will be needed." This implies that mortality monitoring for eagles at an individual project will be required for an indefinite period of time, which may be prohibitively expensive depending upon the monitoring protocol required. Furthermore, a recent study suggests that golden eagle populations are stable (Millsap et al. 2013[215]).

2.5 Avoidance and Minimization

- The Draft states in Volume II pg 3-68 that "Covered Activities will not be sited or constructed within 1-mile of any active or alternative golden eagle nest within an active golden eagle territory (see Appendix H)." What evidence is there to support this setback distance as being effective in minimizing eagle impacts from wind development? To date, we are unaware of any published studies providing evidence of disturbance impacts of wind facilities to golden eagles, or of any setback being effective in reducing eagle fatalities as a result of collisions with turbines. Additionally, how will the DRECP treat existing facilities within DFAs that have active golden eagle territories within 1 mile and, therefore, cannot implement this Conservation and Management Action (CMA)?
- Appendix H, pg H-32. The Draft states, "A project developer or operator will be expected to implement any reasonable avoidance and minimization measures that may reduce take of eagles at a project." Please explain why the threshold for implementing avoidance and minimization measures is "may reduce take." This standard should be higher, such as "proven to reduce take and is logically viable and economically feasible."

2.6 Adaptive Management

- The adaptive management table provided in Appendix H as Table H-2 does not differentiate between take that is consistent with allowable take and take that indicates that a project might exceed its allowable take. Table H-2, as written, seems overly punitive.

[215] Millsap, B. A., G. S. Zimmerman, J. R. Sauer, R. M. Nielson, M. Otto, E. Bjerre and R. Murphy. 2013. Golden eagle population trends in the western United States: 1968–2010. The Journal of Wildlife Management 77(7): 1436-1448

- Appendix H, Table H-2. As written, it is unclear if the years of mortality monitoring are intended to be sequential or parallel. If sequential, CalWEA believes that 6+ years of monitoring are beyond what is appropriate for a 5-year term.
- Appendix H, Table H-2. Step II requires that the developer or owner design a protocol to evaluate the effectiveness of deterrent methods. However, low eagle densities in the desert make this type of statistical design mathematically impossible to prove without an extended trial. These types of studies would be most effective if they were tested in areas with high eagle densities and high fatality rates. CalWEA recommends this language be revised to include off-site testing.

2.7 Mitigation

- According to Appendix H, Table H-10, acquisition compensation will be acceptable to mitigate for up to 30 percent of impacts to golden eagles. However, to date, USFWS has not found habitat conservation to be an acceptable form of compensatory mitigation. Can you please provide additional information to make it clear that this is acceptable to USFWS at the national level?
- How will the percentage of impacts be measured in terms of the acquisition versus non-acquisition compensation allowed? Is it calculated as 30 percent of the impacts plan-wide may be mitigated through acquisition compensation, or 30 percent of an individual project's impacts?
- Appendix H, pg H-43. The Draft states that "costs borne by the applicant will be assured by payment of mitigation requirements occurring before project impacts can begin." Therefore, it appears that the compensatory mitigation fee for golden eagles is intended to be paid upfront for a given project's estimated take. Will this upfront fee cover 1 year's annual estimated take, take over a 5-year period, or the take over the life of the project? Will there be "credits" of any kind?
- If developers and operators do not get some level of credit for "learning as they go," a research or mitigation effort that isn't completely successful will discourage developers and operators from being creative and exploring promising new, but untested, ideas.
- The Draft states, "A project developer or operator will be expected to implement any reasonable avoidance and minimization measures that may reduce take of eagles at a project (Appendix H, pg H-32)." What are the definitions of the word "any" and "reasonable"?
- Appendix H, pg H-44 references "conservation funds" to which money can be contributed. Do these funds currently exist and, if so, are there additional administrative fees? In addition, it is not clear if these funds are administered by the DRECP so that they can decide where to apply the funds or if they simply serve as a "pass through" to move money around that might not have been allowed otherwise.
- Are the costs of mitigation independent of the costs of monitoring plan-wide? Are they independent of the costs of ACPs?

- How were costs calculated in Appendix I, Table I-24 (pasted below), and are the totals per year, per project, per acre, or what other metric? Verbal communications with DRECP agencies indicate that these are plan-wide costs through 2040; however, these details need to be provided in the current Draft. Furthermore, additional details as to how costs would be divided among projects should be provided, as well as the level of certainty that these costs are adequate to address the required commitments within the Draft, as some of the ranges in costs are narrow.

Table I-24
NPV of Mitigation Cost Estimates Using Preferred Alternative Acreage and Lowest Cost First Compensation Acreage Selection Criteria

Plan/Monitoring Requirement	High	Low
Landscape and ecological processes effectiveness monitoring	$1,334,353	$1,500,000
Natural community effectiveness monitoring	$450,102	$500,000
Covered species effectiveness monitoring including items listed below:		
Desert tortoise range-wide population monitoring	$2,381,164	$3,600,000
Mohave ground squirrel range-wide population monitoring	$1,780,474	$2,600,000
Mohave ground squirrel data gap baseline studies	$241,289	$250,000
Bird and bat Covered Species plan-wide monitoring of operational effects	$1,035,011	$1,450,000
Agriculture-dependent Covered Species monitoring	$900,204	$1,000,000
Golden eagle population monitoring	$1,587,443	$2,400,000
TOTAL	**$9,710,041**	**$13,300,000**

2.8 Monitoring

- Appendix H, pg H-46. The Draft states that one goal is to evaluate if the eagle population is robust and resilient, with the capacity to adapt to changing conditions. Please explain how "robust" and "resilient" are being defined, and if and how they are relevant to the regulatory process.
- Appendix H, pg H-46. The Draft states that the results of the population monitoring will be used by managers to evaluate whether the compensation measures to offset take of eagles are effective at maintaining the eagle population. Please explain how this will be done as the population of golden eagles will be impacted by a range of ecological factors, many, if not all of which will play a greater role in eagle population dynamics than wind energy mitigation.
- The Draft states in Appendix H, pg H-48 that "Until such time as the population level monitoring indicates the eagle population is stable or increasing, and can accommodate ongoing take from Covered Activities as well as other non-covered activities, monitoring of project level impacts will be needed." First, Millsap et al. 2013[1] identify golden eagle populations as stable. Second, this requirement implies that mortality monitoring for eagles at an individual project will be required for an indefinite period of time and does not provide a clear direction of what would be required by an individual developer or operator. Please clarify.
- Within the Draft's section on monitoring, some of the materials presented are appropriate for estimating fatalities by species groups (i.e., all birds or all bats), but are not appropriate for estimating fatalities of individual species because there may not be sufficient sample sizes to produce statistically robust fatality estimates.

2.9 Other

- Appendix H, pg H-44. The Draft states, "the applicant will be required to contribute to a DRECP-wide golden eagle monitoring program." However, there is no additional information about the cost of this contribution and how it will be used.
- Appendix H, pg H-44. It is not clear whether, or under what circumstances projects on private land will need to do a NEPA analysis or if the NEPA analysis associated with the General Conservation Plan application will be adequate. Please clarify.
- Appendix H, pg H-43. The "Navigating the eagle permit process" section doesn't explicitly state if the eagle take permit process requires additional NEPA analysis. Please clarify.

3 Specific Questions/Comments Regarding Covered Species Mitigation

- Appendix H, pg H-61. Please define the term "conservation lift."

3.1 Monitoring to Inform Mitigation

- Appendix H, pg H-66. The Draft states that compensation for operational impacts to birds and bats will be based on annual monitoring, and that compensation fees would be assessed every 5 years. However, the Draft states that only 3 years of post-construction mortality monitoring will be conducted. Please clarify these contradictory statements.
- Appendix H, pg H-66. The Draft states that the initial compensation fee for operational impacts would be based on pre-project monitoring of bird use and estimated bird and bat use at the project. However, we are unaware of any studies, to date, that show a clear relationship between pre-construction bird or bat use and post-construction mortality monitoring. Moreover, studies have indicated that pre-construction use is a poor predictor of post-construction fatality at wind facilities. Please specify the support behind this relationship and exactly how the fee will be determined. If mitigation fees for subsequent review periods will be based upon mortality monitoring data, please describe how this approach would be implemented and adaptively managed.
- Appendix H, pg H-66. The Draft indicates that Covered Species' bird and bat mortality would dictate the type and amount of compensation. Can you please provide details with respect to how Covered Species' mortality will be evaluated (i.e., based on found individuals, a fatality estimator, or an Evidence of Absence type analysis), and examples of the anticipated compensation so that developers can evaluate potential financial impacts?

3.2 Calculation of Population Debt

- Appendix H, pg H-67. The Draft references generating high and low estimates given the uncertainty associated with demographic rates. However, the Draft does not explain how these high and low rates will be used after this method is applied.
- Appendix H, pg H-67. The Covered Species mitigation is based on multiple Resource Equivalency Analyses (REAs); however, the details of how the REAs were developed and

parameterized are not provided in the Draft. Although the references provided are helpful, they do not explain the analysis framework and do not allow the reader to re-create the REAs. Please provide these additional details so that the public can evaluate the appropriateness of the analyses.

- Appendix H, Table H-7. Please explain how the population debt per whole bird loss can be different from the population credit per whole bird gain.

3.3 Development of Mitigation Options

- Appendix H, Table H-7. Please explain how mitigation will be developed for species like the Townsend's big eared bat, Bendire's thrasher, and greater sandhill crane, which are species with unknown demographic rates or habitat requirements.
- Appendix H, Table H-7. Please explain whether mitigation will be allowed outside of the DRECP area for non-resident species.
- Appendix H, pg H-69. The Draft states, "For bats, it is possible to establish both the population debt and compensatory credit for successful compensatory actions. However, since bat compensation would rely on threat reduction compensation a restoration acreage is not a relevant measure for restoration." Please provide additional explanation, as the intent of this sentence is unclear. In addition, please explain why restoration is appropriate compensatory mitigation for birds, but not for bats.

3.4 Estimating Compensation and Prioritization

- Appendix H, pg H-70. The Draft states, "Assessment of these compensation actions relies on understanding the relative success of a population prior to the implementation of compensation actions (i.e., an understanding of baseline conditions) in order to evaluate and [sic] subsequent gains." Please explain how these baseline conditions will be derived.
- Appendix H, pg H-75, Table H-9. Please provide details, such as the methods and input variables, as to how the values in Table H-9 were generated so that the public can evaluate the appropriateness of the methods.
- Appendix H, pg H-76. The Draft references that the "amount and location of impacts to natural communities and Covered Species may differ as Covered Activities are implemented from that established here, and the identification of compensation priority areas will be flexible to allow for this variability." Can you please explain if there are any limits on changes and how this might impact the scale and cost of required mitigation?
- Appendix H, pg H-76. Throughout this section of the Draft, it is unclear if the removal of threats or acquisition is the preferred and/or allowed mitigation option. Please clarify.