



September 10, 2010

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California Energy Commission
Dockets Office, MS-4
Docket No. 09-RENEW EO-01
1516 Ninth Street
Sacramento, CA 95814-5512

RE: CEERT and LSA comments on DRECP's Science Advisors Recommendations

Dear Dr. Spencer,

The Center for Energy Efficiency and Renewable Technologies (CEERT) and the Large-scale Solar Association (LSA) want to thank you and the Independent Science Advisory Panel (Science Panel) for your tremendous work to compile and analyze the resource data used to form the basis of the report. Your work is a great first step towards developing a strategy to balance the conservation of California's resources with the development of renewable energy that will help save those resources from the threat of climate change, offering the environmental benefits and greenhouse gas reductions that the state so greatly needs. A strong foundation of scientific data is essential to establishing this balance and setting California on the path to reach its Renewables and Climate Change goals. In this letter, CEERT and LSA provide comment on and ask clarifying questions regarding the Science Panel's recommendations. We hope that the Science Panel will consider our comments and questions as it prepares its final report.

CEERT is a partnership of major environmental groups and private-sector clean-energy companies. We design and fight for policies that promote global-warming solutions and clean, renewable energy sources for California and the West.

LSA represents twelve of the nation's largest developers and providers of utility-scale, solar generation resources. LSA members are engaged in the development, construction and/or operation of renewable generation plants throughout California and other western states. Collectively, LSA's members, whose technologies and models span both photovoltaic and solar thermal applications, have contracted to provide over 6 gigawatts ("GW") of clean, sustainable solar power in the Western United States.

In "Regional Conservation Planning In California: A Guide," John Hopkins outlines two approaches that NCCPs often take. One starts by outlining development zones and then finding conservation areas that are appropriate to balance the development. The other starts by defining conservation areas and then opening all remaining land to development. Based on the scope of this plan, which focuses solely renewable development, it seems clear that the DRECP NCCP should take the former route. The nature of renewable generation, which must be located in the relatively few places that renewable energy resources of sufficient quality and quantity are available and where transmission and related infrastructure are reasonably accessible, renders large swaths of the planning area unsuitable for renewable energy development. Thus, in order for the plan to achieve its goal of balancing biological conservation with renewable development, the DRECP cannot leave renewable energy development location to an afterthought: it must account for the fundamental requirements of renewable generation, or renewable development simply cannot occur, to the great detriment not only to the development goals but to the biological resources that will otherwise suffer as a result of worsening global warming. While we understand that the Science Panel's report rightly focuses on biological and conservation data, the needs of renewable energy generation must also be a key consideration if the DRECP is to be successful. Along these lines, while we support the Science Panel's decision to refrain from weighing in on specific siting locations for renewable resources, we remain discouraged by the Panel's failure to (1) acknowledge the constraints on renewable energy development, an essential feature to account for in designing the DRECP NCCP, (2) recognize the benefits of renewable generation to biological resources and conservation, and (3) acknowledge the unquestionable necessity for compromise that must frame the DRECP and, further its overall conservation goals.

That being said, some sections of the report go too far in avoiding the question of how to balance renewable development with conservation. For instance, the Science Panel recommends using the existing conservation and planning documents currently in place in the desert without any discussion of whether these existing plans properly account for the development of renewable generation or are in agreement with the current best available science. Simply relying on existing plans without examining whether these plans are compatible with properly sited renewable generation, or even the current state of knowledge with respect to conservation resources, would severely compromise the effectiveness of the DRECP, which is hoped to help rebalance land use in the desert. In fact, one reason for the initiation of the DRECP as a new planning effort is the large amount of the desert locked in to conservation and alternative land uses by previous conservation documents and plans. Revisiting these earlier land use plans could allow for a new balancing of land uses, accounting for renewable energy, and better meeting both biological conservation and renewable energy goals. The existing plans were not created with renewable resources as a land use need and may not be compatible with the development of renewable generation and the best available science.

In addition, the panel's recommendation to use environmental groups' conservation plans, which lack scientific peer review, seems to rely on the reputation of these groups instead of sound scientific methods. We believe it is critical that the DRECP planning process be based on documents that are vetted by scientific experts, are based on a transparent process, and are open to public input. Moreover, these plans suffer from the same deficiency discussed above – the lack of a renewable resource component. Before these plans are incorporated into the DRECP, they must be peer reviewed and be shown to share goals with the DRECP.

We support the Panel's recommendation against using the Renewable Energy Action Team (REAT) 'starting point' maps, identifying renewable energy study areas and conservation opportunity areas. The Science Panel points out a critical concern - the development of these maps lacked transparency and public input. According to the REAT Starting-Point map narrative, the renewable energy study areas are identified based solely on biological sensitivity data. However, the REAT provides no information on how biological sensitivity was evaluated and the weighting of different biological information in determining the land's overall biological sensitivity. Moreover, failing to account for other characteristics of the land, including land ownership, availability, planning and zoning requirements, archeological resources, visual resources, recreation, and solar resource values, indicates that these maps do not identify land that is both appropriate and available for solar energy generation. Without disclosures of the method used to compute "biological sensitivity," stakeholders are unable to judge the merits of the map or of the process used to create it. Similarly, we also agree and support the report's assertion that, because it is unclear how the California Natural Diversity Data Base (CNDDDB) data were used in developing species sensitivity ranking maps, the inclusion of CNDDDB as a source of data is questionable. These concerns are reflected in the Science Panel's recognition, which we agree with and support, that "it is critical that all analyses and decision-making processes be as transparent and understandable as possible." (Report, p. 60).

We request that the Science Panel clarify their recommendation to account for species likely to appear in the planning area in the future. The report suggests that the covered species list include "all species known or likely to occur in the planning area, during the plan's permit duration. Note that it is quite possible that some species not currently known from the planning area could enter the planning area over the next 30 to 50 years due to climate change or other dynamics." (Report, p. 15; see also Report, p. 39). First, this recommendation does not account for the fact that it is also quite possible that some species currently in the planning area could leave the planning area over the next 30 to 50 years due to climate change or other dynamics. To the extent that the plan accounts for the future appearance of species, it should also account for the departure of species. Planning for species that are unlikely to be in the planning area in the future seems to be a futile effort. We request that the Science Panel clarify how the DRECP planning effort should account for the species likely to depart from the planning area. Second, the report later acknowledges that modeling is not able to accurately predict future species distribution. "As a consequence, projecting to the future from today alone for any particular species is problematic at best." (Report, p. 57). We want to ensure that the DRECP planning efforts, while inclusive, avoid speculation. Understandably, there is uncertainty around climate change and the future ecology of the planning area; however, the scope of the plan must be based on sound scientific evidence. Without an accurate way to predict future species distribution, this recommendation should be revised or removed altogether.

We also request that the Science Panel review their report to ensure that all of the recommendations are statements of the current state of science, as opposed to policy issues, particularly in the Reserve Design section of the report. In a handful of places in the report, the Science Panel weighs in on policy questions and provides opinions on policy issues regarding DRECP planning and management. For instance, the Science Panel proposes to use mitigation funds for renewable energy developments to fund and implement existing recovery plans. (Report, p. 62). While the Science Panel's opinion of the value of these existing conservation plans is helpful, the DRECP mitigation and funding questions are policy issues that should be left to the Planning Agencies. The Report expresses "endorsement" of specific technologies, (Report, p. 70), with no evaluation of overall environmental impacts of those technologies relative to overall environmental impact of other technologies, and lack of "endorsement" of mitigation measures rather than objectively assessing the success of those measures and recommending means for further evaluation or success of those measures, and even speculates as to reasons measures may be undertaken (see, e.g., Report, p. 75). These "endorsements" are clearly beyond the proper scope and expertise of the Panel and undermine the Report's scientific objectivity. Also, in the report, the Science Panel recommends that, in the identification of no-regrets areas for development, the precautionary principle be applied. (Report, p. 63). The precautionary principle is a principle for policy-making, placing the burden of proof on the proponents of an action to demonstrate that the action is not harmful in the absence of scientific consensus. Here, the Science Panel fails to acknowledge that the policy questions regarding the siting of renewables also implicate concerns about delaying action on climate change. The interim siting questions are complex; scientific input on the important factors to consider is needed, but the Science Panel appeals to policy-making principles rather than providing scientific guidance on siting.

In addition to the examples above, CEERT and LSA would ask the Science Panel to reconsider their recommendation to subdivide the planning area into ecologically relevant planning subunits. The panel fails to account for the fact that the decision to subdivide the planning region is an inherently policy driven decision, which, while needing to be informed with science, is driven by a need to balance policy goals. Also, as the report notes, even if the subunits were driven by only conservation goals they still would be tied spatially to renewable energy development (Report, p. 8), which is in turn is driven by technical and policy constraints. As an example, it would be sound policy to subdivide the planning region into subunits that correspond to potential for transmission access. It is essential that the Science Panel limit their recommendations to those that insure good scientific input and legally required recommendations but limit policymaking recommendations to a minimum.

CEERT and LSA are concerned that, while the Science Panel's recommendations are clearly made with the best of intentions, the recommendations regarding energy generation often oversimplify very complicated questions. For instance, while we agree with the principle that new land disturbance is less ideal than siting on disturbed land, the Panel's recommendation to make use of as much disturbed land as possible (Report, p. 70) seems to be well beyond the scientific mission of the Panel and well into the realm of policy; worse, it is a harmful over simplification that could be expected to create unrealistic expectations and unnecessarily complicate, increase controversy of, and ultimately lengthen the DRECP process, to the detriment of both renewable energy and conservation objectives. In some cases, disturbed land may have significant habitat values for certain species (e.g., Desert Tortoise), potentially even more than pristine desert lands. Similarly,

we agree with the principle that energy facilities should use the limited land and water resources as efficiently as possible, and we support siting solar facilities in areas that have the highest solar resources, but remain concerned that recommending that energy production per land area be maximized (Report, p. 6) creates a standard that ignores unique characteristics of different renewable energy generation that could affect biological conservation (i.e., maximizing energy generation per land area could result in weighing different energy technologies differently and ignores maintenance, associated facilities, and operational characteristics that could affect biological resources, as well as other important environmental outcomes). We would posit that with this recommendation the panel oversimplifies the situation and overlooks the need to fully consider a range of criteria in determining the impact of a particular renewable energy facility.

CEERT and LSA would also like to suggest that the Science Panel's recommendation for a study of linear solar facilities be amended to reflect feedback given by industry and stakeholders to the panel during previous discussions. We want to avoid committing the limited DRECP resources to studies that will not materially advance the DRECP goals. The Industry has looked into these options; linear generation facilities are technologically impossible for certain types of generation facilities, and economically and practically infeasible for others. These and similar technology recommendations are well beyond the scientific expertise of the Panel, and should be eliminated from the Report. However, if the Panel intends to include its conclusions regarding renewable technologies, we urge the Science Panel to identify such recommendations, indicate its lack of expertise on these issues, consider the input of the energy industry regarding the viability of these recommendations, and invite input to assess the full environmental and other implications of the technologies.

Finally, CEERT and LSA would like to see some discussion of the benefits of renewable energy in conserving California's resources. For the most part, the report focuses on the harm that development will have on species, without accounting for the fact that the renewable energy development offers some environmental benefits. For instance, the report acknowledges that some species may not be harmed by renewable energy development and may benefit from the conservation actions taken under the DRECP (Report, p. 15), but fails to acknowledge that species would benefit—and may even depend upon the success of—the renewable energy development itself. (Report, p. 15). In this way, the report appears only to take into account the characteristics of renewable energy facilities that are in tension with conservation; however, renewable energy facilities will also provide benefits to biological resources both within and outside of the planning area by reducing air emissions associated with conventional generation, reducing the need for fuel extraction and transport, and, perhaps most importantly, reducing greenhouse gas emissions and California's carbon footprint. Climate change is widely recognized as a serious threat to endangered species, and perhaps the most serious threat to extinction of many of those species. Reducing greenhouse gas emissions is necessary to protect those endangered species and threatened ecosystems, and greenhouse gas reductions simply cannot occur in a meaningful way without substantial deployment of renewable energy. While these benefits may be difficult to quantify, we encourage the Science Panel to provide a qualitative discussion of the benefits renewable energy will provide for endangered species in their report. We encourage the Panel to ensure that their report and recommendations take a broad view of the goals of the DRECP and account for climate change. Thinking about the climate problem in the context of the DRECP is essential.

CEERT and LSA appreciate the Science Panel's work on this report and acknowledge the indispensable role the Science Panel plays by bringing a scientific voice to the DRECP discussion. This report will be a great resource as we continue to work on this monumental plan and try to achieve a consensus a well developed science based plan.

Respectfully,



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