via electronic mail

January 11, 2013

Patrick Young
Regulatory Analyst, Energy Division
California Public Utilities Commission
Patrick.young@cpuc.ca.gov

Dear Mr. Young,

Re: December 19, 2012 Joint Workshop on Renewable Resource Portfolios for the California ISO Transmission Planning Process.

This letter contains the comments of the Sierra Club and Defenders of Wildlife on the December 19, 2012 Joint Workshop on Renewable Resource Portfolios for the California ISO Transmission Planning Process (TPP) (the "Presentation").

The Sierra Club ("Sierra Club") is a national nonprofit organization of approximately 1.3 million members and supporters dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass protecting our public lands, wildlife, air, and water, while at the same time rapidly increasing our use of energy conservation, efficiency improvements, and renewable energy. Our engagement in the transmission planning process is based on an interest in ensuring that energy development occurs thoughtfully and sustainably. The Sierra Club believes it is important to incorporate California's full suite of relevant energy and climate policies and programs into generation and transmission planning. In addition, Sierra Club would like to ensure that all state energy bodies use consistent, valid methodologies and assumptions for determining energy resource needs and the preferred location of energy resources. This coordination is necessary if California is to meet its climate protection and energy policy goals, while protecting the natural environment that the climate and energy policies are intended to benefit.

Defenders of Wildlife ("Defenders") is a national non-profit conservation organization with more than one million members and supporters in the United States, 200,000 of which reside in California. Defenders is dedicated to protecting all wild animals and plants in their natural communities. To that end, Defenders employs science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to prevent the extinction of species, associated loss of biological diversity, and habitat alteration and destruction. Defenders strongly supports the emission reduction goals found in the Global Warming Solutions Act of 2006 (AB 32), including the development of renewable energy in California. As we transition toward a clean energy future, it is imperative for our future and the

future of our wild places and wildlife that we strike a balance between addressing the near term impact of large-scale solar development with the long-term impacts of climate change on our biological diversity, fish and wildlife habitat, natural landscapes, and productive prime agricultural lands. To ensure that the proper balance is achieved, we need smart planning for renewable power that avoids and minimizes adverse impacts on wildlife and lands with known high-resource values.

We thank the California Energy Commission (CEC) and California Public Utilities Commission (CPUC) for the opportunity to better understand the assumptions used by the California Independent System Operator (CAISO) in the transmission planning process. We understand there is a relatively short window for the CEC and CPUC to revise the 2013 resource portfolios, so have limited our comments to those most integral to conservation concerns.

I. CPUC Presentation on the Proposed Resource Portfolios for Portfolios for the 2013-14 Transmission Planning Process.

a. Coordination between Transmission and Generation Planning Processes.

We are happy to see the CPUC, CEC and CAISO working together towards greater coordination between generation and transmission planning processes.[1] This coordination is key to ensuring energy generation occurs in the right places and ensuring that each of California's policy goals and efforts are properly incorporated into the transmission planning process.

Priorities for siting future renewable energy facilities must be based upon comprehensive, sustainable land use and environmental planning principals and not just the expediency of siting near existing or planned transmission. Future transmission must be planned to serve those areas which provide Smart from the Start siting for renewable energy development. For example, both the Westside of the San Joaquin Valley and the Imperial Valley have enormous potential for lower impact renewable energy development but are hampered by a lack of transmission capacity. We are pleased to see the CAISO's recent Central Valley Study and evaluation of additional transmission reinforcements to the Imperial Valley. We encourage the CAISO to explore creative solutions to enable the delivery of renewable energy resources from these areas.

b. Portfolio Weighting and Type.

We thank the CPUC and CEC for modeling both an environmental and a high DG portfolio. As discussed in greater detail below, we believe that the environmental metric could be significantly improved by using tools already possessed by the CEC to more accurately identify high-conflict biological areas.

[1] As Sierra Club identified in previous comments to the CAISO, the CAISO seems to be conflating the amount of additional renewable energy necessary to meet California's RPS goals—which is what the CPUC value provides—with the amount of new transmission capacity that will be needed to deliver that renewable energy, which could potentially lead to significant overbuilding of transmission. See, Sierra Club's comments on the California Independent System Operator's 2011/2012 Conceptual Statewide Transmission Plan Update/2012/2013 Transmission Planning Cycle, dated September 28, 2012.

We are less clear how this information ultimately impacts transmission development. Given the importance of transmission availability in guiding generation development (both in terms of guiding development to undisturbed areas, or in precluding generation in areas of lower impact, such as Westlands[2]), we think that the improved environmental score should be incorporated into the CAISO's transmission planning process outside of the environmental portfolio, which seems to be rarely, or ever, the preferred portfolio. We would argue that the environmental and permitting scores should be given greater weight in the commercial interest portfolio, since this seems to be the portfolio ultimately chosen, or that the information used from modeling the environmental portfolio be otherwise incorporated into the CAISO's transmission planning process.

Increasing distributed generation will decrease the burden on lands with high-biological resource values. Distributed generation, energy efficiency, demand response and energy storage are each key components of an environmentally preferred energy mix. For this reason, the environmental and high DG portfolios, as currently drawn, create an artificial environmental choice, where the "environmental" portfolio assumes a higher need for land-intensive renewable energy projects, while because the high DG portfolio does not give a greater weight to the environmental score, transmission to high-conflict areas could still occur. There are a number of ways to get to this problem, including: (i) merging the environmental and high DG portfolios into one, (ii) using higher assumptions regarding small-scale PV in the high DG portfolio in *both* the environmental and high DG portfolios, (iii) giving the environmental or permitting scores greater weight in the high DG portfolio.

c. DRECP.

We strongly support incorporating the land use and natural resource data developed in the Desert Renewable Energy Conservation Plan (DRECP) process into transmission planning going forward.[3] The DRECP is a far-reaching initiative with huge impacts on the physical and energy landscape of California. The CAISO is an integral part of this process, and in particular, has provided invaluable guidance on the development of the DRECP Conceptual Transmission Plan. The DRECP will operate by designating areas of the California desert as renewable energy development focus areas (DFAs). Gen-ties, transmission lines and facilities (both upgrades and new), and transmission line stringing activities are each covered activities subject to the DRECP within the DRECP plan area. Transmission is a key incentive for developing within DFAs.

For these reasons, we feel that DRECP should not be treated as a purely environmental metric. Currently, due to the calculators' weighting system, the DRECP potentially impacts transmission planning if the environmental portfolio is chosen. Given the importance of the DRECP, particularly with regards to transmission planning, and the fact that the environmental portfolio is unlikely to be chosen by the CAISO, it makes sense to explore other means to give the DRECP

[2]We are pleased the environmental portfolio gives greater weight to the Westlands project. We continue to feel this project provides a unique opportunity.

[3] As we discuss in greater detail below, dealing with the DRECP at the moment is a bit awkward as the environmental document is not yet complete.

(and future energy planning initiatives[4]) greater weight within the resource portfolio calculator. Approaches could include: (i) creating a new "DRECP" or "Land Use" portfolio, (ii) using DRECP as a new factor for each of the portfolios, (iii) including the DRECP metric in the permitting, as well as environmental scores, or (iv) applying the DRECP as an independent test.

II. CEC Presentation on the Methodology of the Environmental Scoring of Renewable Energy Projects by the California Energy Commission and California Public Utilities Commission.

a. DRECP.

We are very pleased to see the DRECP incorporated into the transmission planning process. The more granular biological data from the DRECP builds on the RETI process to determine which lands are high- conflict and which are appropriate for development. As discussed previously, transmission is pivotal to the long-term success of the DRECP, and the long lead time required to develop transmission projects makes it important to start incorporating these assumptions as soon as possible. However, if the DRECP is incorporated it should include the most current materials.

The DRECP recently published an interim document[5] (the "Interim Document") with updated Development Focus Areas (DFAs).The Interim Document includes the alternatives which will be analyzed by the REAT agencies in the Draft DRECP and Draft EIS/EIR in 2013, and the DFAs within this document have been revised. The CEC should use the Interim Document, rather than the July 2012 document when scoring projects.

Moreover, it is important to recognize that the DFAs do represent a true range of development alternatives and have vastly different conservation impacts. [6.] (For example, in the Interim Document, Alternative 1 provides for 70,559 acres of lands considered high and moderate biological sensitivity within DFAs while Alternative 6 provides for 1,327,690 acres of high and moderate biological sensitivity lands within DFAS.) Because of the wide range in biological impacts between the alternatives, it would be inaccurate to term all projects within the DRECP and a DFA as meriting the relatively positive environmental score of 25, particularly as lands within a DFA on disturbed or degraded lands[7] (those which would most accurately be termed as clearly positive from a conservation perspective) already receive a zero score. We imagine this scoring would make sense when the DRECP is complete. We do however; agree with the CEC that projects within the DRECP but outside *any* DFA should be given the worst score.

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[4] The CEC 2012 Integrated Energy Policy Report Update proposes developing distributed renewable energy development zones (with a focus on the Central Valley) and renewable energy development zones.

[5] Maps of the DFAs in the Interim Document can be found at http://www.drecp.org/documents/docs/alternatives_eval/Section_2_Description_of_Alternatives.pdf

[6] Although none of the DFAS include land administratively or legally precluded from development, and each start with a base of disturbed and degraded lands, they truly range to include a great deal of development flexibility.

[7] We encourage the CEC to utilize the EPA's Repower lands to determine contaminated, disturbed and degraded lands both within and outside the DRECP plan area.

However, much of the biological data layers which the CEC has used to draw up the DFAs as part of the DRECP process, (including but not limited to, critical or designated habitat for threatened and endangered species, designated core recovery areas, connectivity and linkage areas, disturbance and vegetative maps) would be incredibly useful stand-alone tools in providing accurate environmental scores. We would be interested in learning which map layers the CEC applied as free-standing scores, and which were assumed covered by the DRECP DFA creation process. We understand that the CPUC and CEC have a limited time to finalize the portfolios, but are happy to work with CEC staff to determine which maps are available and could be applied and scored easily (in a binary manner or otherwise) within a relatively short turn-around. It is our hope that the CEC has these data layers available for areas outside of the DRECP as well.

b. Military Lands.

Although we recognize that military lands may often be contaminated and low biological resource value, within the California desert, many military bases are relatively undisturbed and provide valuable habitat for desert tortoise and other special-status species. [8] Rather than giving all projects within an active military base a score of 25, we recommend looking at the biological resources of the particular location. A recent Department of Defense study has inventoried military bases in the California desert and identified certain locations as appropriate for renewable energy development based on low biological, cultural or military conflicts, [9] and may be a valuable start.

c. Projects outside of the DRECP.

Our groups have long advocated for a greater focus on renewable energy projects outside of the DRECP area, particularly on disturbed and impaired lower quality farmland in the Central Valley, and with a particular emphasis on the Westlands project[10]. Giving an automatic score of 50 to all projects outside of the DRECP would be inaccurate and would imply that the California desert is de facto preferred from a conservation perspective, which is not the case. Instead, the CEC should look at available habitat and vegetation maps, such as those which show core recovery areas or critical habit, to determine the environmental score of projects outside of the DRECP. As discussed, we are eager to work with the CEC to determine what maps are available for the state of California and to determine which are the most useful for this exercise.

Furthermore, giving a score of 50 for all projects on agricultural lands ignores the fact that in addition to producing our food, agricultural land in California is home to many threatened and endangered species. We recommend that similar habitat maps, with a particular focus on core recovery areas, particularly for the upland species of the San Joaquin Valley, be applied to projects on agricultural lands.

[8] http://articles.latimes.com/2012/nov/18/local/la-me-adv-marines-tortoise-20121120

[9] http://www.serdp.org/News-and-Events/News-Announcements/Program-News/DoD-study-finds-7-000-megawatts-of-solar-energy-potential-on-DoD-installations-in-Mojave-Desert

[10] We are happy to see the CAISO's Central Valley Study and the CEC's recognition of the Central Valley as an appropriate area for study in the CEC IEPR.

We also question applying a score of 50 to all non-California projects. Although California has some of the strongest environmental protection laws in the nation, species do not see state borders. Moreover, these projects can often involve developing transmission lines through hitherto undisturbed areas. To the extent that many of these projects are located on public land, we encourage the CEC to work with the Bureau of Land Management in other states to obtain habitat maps, particularly for species such as the greater sage grouse, desert tortoise and golden eagle.

d. Avian Impacts.

We would like to identify that renewable energy projects have vastly different biological impacts, and that the criteria used by the CEC, which tend to focus on on-the-ground impacts, does not necessarily capture the full range of impacts from wind energy and solar power tower projects. The environmental impacts of wind or solar power tower projects in a particular area are more difficult to quantify because of relatively scarce avian use data, but we are happy to discuss with the CEC in greater detail.

Again, we thank the CPUC and the CEC for the opportunity to participate in this process and look forward to working cooperatively to ensure the transmission planning process captures the full suite of California's energy and environmental goals and programs.

Sincerely,

Sarah K. Friedman

Sarah K. Friedman
Senior Campaign Representative
Beyond Coal Campaign
Sierra Club

Kim Delfino

Kim Delfino
California Program Director
Defenders of Wildlife