



**California Office**

1303 J Street, Suite 270 | Sacramento, CA 95814 | tel 916.313.5800 | fax 916.313.5812  
[www.defenders.org](http://www.defenders.org)

November 19, 2008

Via Electronic Mail – Hard Copy by Mail

California Energy Commission  
Attention: Clare Laufenberg Gallardo  
1516 Ninth Street, MS 46  
Sacramento, CA 95814

Re: RETI Phase 1B Draft Report

Dear Ms. Laufenberg Gallardo:

On behalf of Defenders of Wildlife (“Defenders”) and our more than half a million members and supporters in the U.S., 100,000 of which are in California, I am writing to provide comments on the Renewable Energy Transmission Initiative (“RETI”) Phase 1 B draft report, dated October 2008 (hereinafter “RETI Report”). We also support the comments submitted by the California/Nevada Desert Energy Committee of Sierra Club, Mojave Desert Land Trust, Wildlands Conservancy, and Western Watershed Project, dated November 19, 2008. We incorporate by reference our comments on the RETI Draft Phase 1A Report, dated March 24, 2008, and our August 27, 2008, comments on the RETI Environmental Working Group (“EWG”) Interim Draft Phase 1B Report as relevant comments to the RETI Report. (Attached).

Defenders is dedicated to protecting all wild animals and plants in their natural communities. To this end, Defenders employs science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction.

Defenders strongly supports the emission reduction goals found in AB 32 and California’s very aggressive renewable energy goals, which were recently reiterated in Executive Order S-14-08. To this extent, we are committed institutionally to working with both state and federal agencies and private energy companies to help craft solutions towards increasing renewable energy production, which is not at the expense of wildlife and its related habitat requirements.

**RETI Report Economic Analysis of CREZ:**

While we strongly support California’s renewable energy goals, we do not believe that the only way these goals will be achieved is by championing only large solar energy projects, which appears to be the foundational assumption in the RETI report. Energy conservation should be the first and foremost strategy for reducing our dependence on fossil fuels. Energy conservation is the most cost effective and least intrusive of all measures.

**National Headquarters**

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Washington, D.C. 20036-4604  
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The second strategy should be roof top solar and small locally generated renewable power. California is leading the way in technological innovation, and we are on the brink of a renewable energy revolution driven by thin film photovoltaic (“PV”) energy. The RETI Report only briefly acknowledges that solar PV potential is virtually inexhaustible, and that at projected decreases in PV costs, a fleet of small-scale direct-to-grid PV facilities distributed around the state could provide 2/3 or more of the net short renewable energy needed by 2020 to meet the state’s goals. This direct-to-grid scenario would drastically reduce the need for new transmission and for massive transmission-dependent projects. Unfortunately, the RETI Report fails to analyze the comparative efficiency of direct-to-grid power as opposed to transmission-dependent power. Which paradigm offers the greatest public benefits at the least environmental and ratepayer cost? This is a threshold question that should be answered, and if need be, revisited with changing conditions.

The RETI Report does acknowledge that the factors influencing renewable energy costs are very dynamic, but the report’s numbers are conservative, perhaps overly conservative, in its cost assumptions for solar photovoltaic energy generation. Indeed, in Section 5.0 of the “CREZ Economic Analysis,” the report states, “unlike most other renewable technologies, capitol costs in the photovoltaic industry have significant potential to decrease, and there is considerable commercial interest in utility-scale ‘thin film’ systems. This sensitivity tests an alternate thin film technology for solar with capitol costs of about \$3,700/kWe, roughly half that of tracking crystalline. This figure represents goals and cost targets provided by manufacturers and developers. Notably, these capitol costs are also lower than the large scale solar thermal projects; therefore this film solar is assumed to occur both at the distributed scale (20MW) and also in large scale blocks (150 MW)”. RETI Report at p. 5-15.

Therefore, we believe there is an issue as to whether the RETI Report’s assumptions reflect the real cost of solar photovoltaic energy generation. Southern California Edison’s (“SCE”) recent commercial roof project to generate 250 MW using solar photovoltaic panels is estimated to cost \$875 million. This project appears to be cost competitive with large transmission-dependent projects that also have transmission costs and losses. The SCE solar PV project has no transmission cost and no line losses, and should have a much smaller carbon footprint.

Finally, Defenders strongly objects to the use of “proxy” projects in the RETI analysis for solar thermal projects. The only criteria for a “proxy project” for solar thermal is that they were on “candidate land parcels without demonstrated development interest. RETI Report Economic Analysis at p. 6-12. The same standard is applied for solar PV. For wind, the standard for “proxy projects” are projects that are not matched to a pre-identified project. This “proxy project” concept makes no sense. Basically, this standard makes the assumption that despite all of the renewable applications pending out in the desert (which are considered “pre-identified project”); the RETI report authors are going to make up more projects even when no interest has been expressed to develop those areas. This standard artificially inflates the energy production valuation of the individual CREZs, making some CREZs score higher in the rankings even if there are no real projects there. We urge that concept of “proxy” projects is eliminated.

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## **Environmental Assessment of Competitive Renewable energy Zones (CREZ)**

We believe that, at the outset, the RETI Report Environmental Assessment suffers from a fundamental flaw: the failure to start this process with the prime directive that this process should take all steps to evaluate and encourage the placement of renewable energy projects on already disturbed and degraded lands. By taking a “low impact” approach at the outset, the report could have made a much greater effort in its analysis to discover what areas in California would be the most suitable for energy development. Unfortunately, the analysis starts out by assuming the all land is potentially available and we will only take off the table the “most sensitive” or most fraught with litigation potential. By taking a “defensive” posture in the analysis, the RETI Report authors did not emphasize seeking out and refining information about disturbed lands. Indeed, a recently disclosed map by the Coachella Valley Associate of Governments (“CVAG”) shows 9,000 acres of “abandoned private farmland” in Eastern Riverside County, all located near Interstate 10. (Attached). If the RETI Report authors had emphasized the need for low impact development, they might have found this map if they had asked CVAG.

We urge that the next phase of RETI shift the focus of its analysis to look for “disturbed and degraded” lands, which are located in close proximity to existing transmission corridors, as the first priority lands to be developed for renewable power. We fully support the map provided by the California/Nevada Desert Energy Committee of Sierra Club, Mojave Desert Land Trust, Wildlands Conservancy, and Western Watershed Project in their comment letter, dated November 19, 2008. (Attached). This map identifies areas in the California desert that are already impacted and near existing transmission. This map provides a strong starting point for moving forward with a “low impact” development focus.

While we do support a “low impact” development approach, we opposed any proposed projects that are projected to occur within critical habitat for our focal species such as the Desert Tortoise and Mohave Ground Squirrel, as well as those that fall within Areas of Critical Environmental Concern (ACEC) or Desert Wildlife Management Areas (DWMA’s). Climate change will bring enormous challenges for desert species adjusting to changing conditions in desert ecosystems. For this reason, we see preserving key habitat parcels that may provide for climate change refugia in the coming years as important, along with areas that provide good potential habitat for species whose populations have been depressed historically due to inappropriate land management.

One of the greatest areas of controversy in developing renewable energy is the siting of extremely massive solar facilities on undisturbed land. Due to its high isolation, the California desert is viewed as a prime area for massive deployment of solar electrical generating plants. However, if these extensive facilities are improperly sited, some of the state’s last major open landscapes, highly valued for their natural, scenic and cultural resources, could be industrialized.

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## *Comments on Specific Sections of the RETI Report*

### Section 1.1 Overview:

“The EWG is chaired by Johanna Wald of the Natural Resources Defense Council (NRDC) and Carl Zichella of the Sierra Club, the two environmental representatives on the SSC, meets weekly via internet and teleconference links. Voting representations on the EWG is limited to SSC members but meetings and discussions are open to all interested parties. Decisions are made by consensus of the participants to the extent possible.” RETI Environmental Assessment at p. 1-1.

While we applaud Carl and Johanna for trying to keep the other NGOs informed of the process, the EWG process was frustrating. There were only two voting members from the conservation community on the EWG, the rest of the members were industry-related. The non-voting members repeatedly raised objections about the EWG process and ranking criteria. For example, we strenuously objected to the placement of projects within ACECs, DWMA's and critical habitat, but were ignored. Moreover, documents were made available for comment on very short timelines, making it difficult for the members who were not allowed to be involved in a more day-to-day basis.

We also believe that there was inadequate participation and representation throughout the entire process by US Fish and Wildlife Service, CA Department of Fish and Game, the National Parks, Bureau of Land Management, the military and city or county government representatives. This lack of appropriate participation is demonstrated in Section 1.6 of the Summary, which states, “in September, the Department of Navy requested that the BLM ‘withdraw’ 365,906 acres of leasable land.” This land includes several RETI-identified solar thermal projects.

Finally, the RETI Report maps for review of this report and its outcomes do not give enough information to evaluate adequately the potential environmental impacts of the individual CREZ. The display of information and the maps are confusing and lacking in enough detail to be able to read them. This made the review of the RETI Report very frustrating and does not provide sufficient information to the public. It was only after colleagues were able to buy maps and use their GIS capacity were we able to analysis where the proposed CREZs were in relation to sensitive biological resources or lands that were not supposed to be open for development.

### Section 1.2 Summary:

1.2.1 Restricted areas: “The Bureau of Land Management (BLM) and the U.S. Forest Service (USFS) are currently considering adopting new policies for renewable energy development on lands within their respective jurisdictions. Final adoption of such policies may warrant reconsideration of the assumptions and decisions made here.” This observation further demonstrates the earlier point about lack of coordination with and participation by the BLM and USFS. We hope that the new executive order will set up a process with closer coordination. However, this lack of coordination does make us question the efficacy of the placement of the CREZs are potentially premature.

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This section also makes the point that since the wind industry has raised issues with some of the environmental criteria, there might be changes to the report and analysis. According to the report, a “compromise” is being worked on and may be forthcoming. This appear to make the Environmental Assessment a moving target and raises a significant issue about the openness of the process.

1.2.6 Unresolved Issues and Recommendations: Item #2. “Statewide data on Native American cultural sites should be collected and formatted for ready access, and a methodology should be developed for consideration of potential impacts on these sites by CREZ development.” We are confused as to why this data was not included in this report. These sites were provided by ASM Constraints Study of Cultural Resource Sensitivity in the California Desert, prepared by Russell Kaldenberg, MA PA.

### 2.1 Category 1 Lands

As we mentioned in our earlier comments, we strongly urged that all lands considered to be a part of an Habitat Conservation Plan or Natural Community Conservation Plan’s “conservation reserve/strategy” should be part of Category 1. These lands should be avoided at all costs given the availability of other lands for development. In addition, we urged that the conservation lands found within the West Mojave Plan, which is in the final stages of approval, should also be included as category 1. We also believe that all lands under conservation easement should be in category 1 as development of renewable projects on these lands are incompatible with the terms of a conservation easement. None of these lands were included.

### 2.2 Category 2 Lands

The environmental organizations participating in EWG process strenuously requested that habitat for threatened and endangered species, Desert Wildlife Management Areas, and BLM Areas of Critical Environmental Concern be included the Category 1 list. This was not done. We believe that that failure to analyze the 1% development cap on DWMA’s and ACEC’s creates a problem with the results of the RETI process by giving a false impression that these lands are available for projects.

### 3.0 Agriculture and Disturbed Lands

One of the greatest areas of controversy in developing renewable energy is the siting of massive solar facilities on natural undisturbed land. Due to its high isolation, the California desert is viewed as a prime area for massive deployment of solar electrical generating plants. However, if these extensive facilities are improperly sited, some of the state’s last major open landscapes, highly valued for their natural, scenic and cultural resources, could be industrialized.

As outlined above, we believe that the RETI process has failed to identify any significant disturbed or agricultural acreage for consideration as renewable energy sites. Publicly available data layers showing known important biologic value, federal and state protective designations, and other sensitive indicators were mapped (and submitted to RETI previously). These layers were overlaid with cultural data from the ASM Constraints Study of Cultural Resource Sensitivity in the California Desert (also submitted to RETI previously). Then, various areas of likely low environmental value in proximity to existing

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transmission were identified. The identified areas contain high proportions of marginal agricultural lands in the desert and 500' wide buffer areas along some portions of Interstate Highways. With regard to utilizing highway buffers, we recommend there be a concomitant plan to proactively identify and preserve wildlife movement corridors.

4.0 Rating Methodology:

Defenders objects to the current rating methodology used by the RETI process. We do not believe that it is appropriate to divide the environmental scores by the annual energy produced in a CREZ. The result of this approach downgrades the environmental impacts if the CREZ is a high energy producer. If the intent of the RETI EWG process was to identify those areas where it would be essentially prohibitive to develop, then we believe that it would be clearer to use the environmental scores alone.

While Defenders supports the use of the significant species criteria in the draft report, we do believe there are significant limitations to this information. Since the data we are using is data generated by people going out and looking for specific kinds of species, we need to understand that the *lack of occurrence* of species in an area does not mean that they do not occur there or that this area is not important to a specific species. Indeed, as noted above, the database we are using for this effort is limited.

The significant species criteria also does not address the issue of *species rarity* within a CREZ. For example, there are species with very limited ranges and/or limited number. By simply noting the number of occurrences, we are missing the significance of their very existence in that area. For example, some plant species exist in only two or three locations in the entire state. By making our significant species criteria hinge on the number of occurrence, it could appear that the existence of that species in the one location is not that significant, but in reality, it is very significant due to its rareness. Finally, the significant species criteria also does not address the issue of species richness or density in an areas. There is no distinction made between whether or not there was 1 species found or 100 species found. It would be that the area identified was of great significance because of the density of individual on that land. However, none of these important factors are captured by the report.

Defenders urges that additional thought is put into how the significant species criteria could be expanded to include a better sense of rareness and density in order to avoid the risk of ranking a CREZ as having a lower environmental impact when actually, there is very significant environmental impact.

The CREZ Impacts on Biological Resources and Important Lands:

While the maps produced by the RETI report left a lot to be desired in terms of evaluating how well the CREZ boundaries were drawn in relation to sensitive habitat areas or “off limit” lands, we were able to discern the following problems:

**Tehachapi CREZ:** This CREZ appears to include Mohave Ground Squirrel Conservation Areas and ACECs

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**Inyokern CREZ:** This CREZ appears to include Mohave ground squirrel Conservation Areas and ACECs.

**Kramer, Barstow, Victorville, Needles, Riverside East, Imperial East, and San Bernardino-Lucerne CREZs:** These CREZs appear to include Desert Tortoise Critical Habitat.

**Palm Springs CREZ:** This CREZ appear to encompass the Santa Rosa and San Jacinto Mountains National Monument, Conservation Areas designated by the Coachella Valley MSHCP/NCCP, the BLM Whitewater River Area of Critical Environmental Concern, the Big Morongo Area of Critical Environmental Concern, the San Geronio Wilderness and Arroyo Toad Critical Habitat.

**Conclusion**

Thank you for the opportunity to present these comments. We will continue to stay involved in this process and hope that Governor Schwarzenegger's Executive Order will provide an opportunity to address the serious shortcomings of the current RETI process. If you have any questions or concerns, please do not hesitate to contact D'Anne Albers, Desert Representative, or me.

Sincerely,

Kim Delfino  
California Program Director