

**California/Nevada Desert Energy Committee, Sierra Club
Desert Protective Council
Mojave Desert Land Trust
The Wildlands Conservancy
Western Watersheds Project
National Parks Conservation Association**

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

BY EMAIL TO claufenb@energy.state.ca.us – ORIGINAL BY MAIL

Re: Renewable Energy Transmission Initiative Phase 1B report

Dear Ms Laufenberg Gallardo:

Thank you for the opportunity to comment on the RETI Phase 1B Report (“report”). These comments are being submitted on behalf of the California/Nevada Desert Energy Committee of Sierra Club, Desert Protective Council, Mojave Desert Land Trust, The Wildlands Conservancy, Western Watersheds Project and National Parks Conservation Association.

We applaud the state of California for taking a leadership role in combating global climate change, and recognize that all sectors will need to work together to achieve the State’s ambitious goals for greenhouse gas reductions. In that spirit, this letter will not only outline our concerns with the report, but it will also offer a constructive approach to initial identification of low value areas for consideration as renewable energy solar sites, an approach that can easily be folded into the much needed ecosystem planning recently proposed by the Governor’s Executive Order.

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 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. However, on account of its narrow mission as well as the conflicts inherent in its industry-dominated stakeholder group, RETI is ill-equipped to objectively address this non-transmission outcome.

RETI mission

Again, recognizing the good intentions behind the Renewable Energy Transmission Initiative (“RETI”), it is nonetheless essential to also understand and acknowledge the inherent limitations of RETI’s process and to hold its recommendations in abeyance pending an ecosystem review of environmental impacts, and a more consumer-oriented review of renewable energy direct-to-grid options.

There is a great deal of useful technological information about utility-scale renewable resources that has been developed and organized in the RETI Phase 1B report, in fact far too much information to be absorbed by the layman in a two week review period. But the overarching concern is that this information is presented through the filter of the industry perspective. RETI’s mission is narrow:

“California has adopted energy policies that require substantial increases in the generation of electricity from renewable energy resources. Implementation of these policies *will require extensive improvements to California’s electric transmission infrastructure.* [emphasis added] The California Renewable Energy Transmission Initiative (RETI) is a statewide planning process that will identify the transmission projects needed to accommodate these renewable energy goals.”

The outcome of the RETI process is a foregone conclusion – a transmission-dependent system of large remotely located power plants. Additionally, the RETI process was clearly not designed to provide the necessary time, tools, expertise, independent review or public input to adequately and objectively assess either the societal costs or the relative environmental costs of transmission-dependent versus point of use renewable energy.

Assumptions

The basis for the Phase 1B report (“report”) is largely the assumptions that were developed by the Phase 1A Working Group (“Working Group”). However, the comments submitted on the Phase 1A report were not all publicly recorded and addressed, so our comments may overlap that process as well. Attached are some of the previously submitted comments, articulating major concerns that remain unaddressed.

In order to calculate costs for comparing the benefits of different energy zones, certain assumptions were made about the cost to provide transmission to them. The Working Group decided that several planned (but not yet approved for construction) major transmission projects would be presumed available at a date certain. Notably, these projects included the extremely controversial Green Path North and Sunrise Powerlink. Since these transmission projects were assumed to be part of the base case scenario, the costs of these projects were assumed to be zero.

This fallacious assumption skews the environmental ranking of renewable zones that would be served by these “available” transmission projects and gives those zones a higher economic ranking -- which in turn can be used to justify the controversial transmission projects! In addition, the reality is that these projects do have enormous capital costs, which, if incurred, will be borne on the back of the ratepayers.

In addition, the report fails to analyze the comparative efficiency of direct-to-grid power as opposed to transmission-dependent power. What 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 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. We question whether the report’s assumptions reflect Southern California Edison’s recent commercial roof project to generate 250 MW using solar photovoltaic panels at an estimated cost of \$875 million. This project appears to be cost competitive with large transmission-dependent projects that have transmission costs and losses; whereas the SCE solar PV project has no transmission cost, no line losses, and should have a much smaller carbon footprint to construct and maintain.

Environmental ranking

The environmental ranking process was a frustrating exercise. First, the composition of the Environmental Working Group (“EWG”) was at odds with its charge. For comparison, the Phase 1A Working Group (which formulated the assumptions underlying the economic ranking) had a voting membership that was dominated by industry, with only two non-industry members (state representatives). But, in stark contrast to its environmental charge, the EWG which did the environmental ranking had a vast majority of non-environmental voting members and only two environmental voting members.. Although non-stakeholder environmental organizations were allowed to have representatives who could partake in the discussion, they could not vote, and on several major issues their concerns went unaddressed.

More importantly, the report states that the environmental criteria are designed to identify those CREZ (competitive renewable energy zones) that “maximize the use of previously disturbed lands.” Yet, from the outset, because of a non-environmental special interest, the EWG got mired down in a dispute over the definition of “disturbed lands.” The outcome was that “disturbed lands” were so narrowly defined that this criterion became useless from any practical standpoint.

Likewise, in deciding what areas should be excluded from energy zones, most of the environmental organizations requested that habitat for threatened and endangered species, as well as HCP/NCCP areas, Desert Wildlife Management Areas, and BLM Areas of Critical Environmental Concern be included in the exclusion list. This was not done.

As for the environmental criteria, non-voting environmentalists were again overruled. The criteria, the choice of data sets, and the weighting were artificial and arbitrary. To illustrate this problem, if one asked most biologists and environmentalists where to put solar projects, the response would most likely be: “rooftops” or “disturbed land.” Arguably, maximizing use of disturbed land is perhaps *the* most important criterion to consider when locating an environmentally preferable Competitive Renewable Energy Zone (“CREZ”). However, the EWG failed to properly identify disturbed lands and made this criterion just one among eight, minimizing its effectiveness.

Another example of the criteria deficiencies is the fact that RETI’s species data set included diversity but not rarity. Hence, critical habitat for a rare species is not given any weight if the habitat is not also diverse. Using this criterion may have given the Kramer CREZ, in tortoise habitat, a more benign environmental ranking than it merits. In sum, the environmental ranking criteria are not robust, do not reflect conservation biology principles, and do not reflect the conservation community’s input.

As it turned out, the economic ranking values (driven by high energy output) swamped the environmental rankings anyway, so that the environmental ranking exercise had little effect on the designation of preferred CREZs.

As just one example of how poorly the environmental process worked, attached is a detailed map of the Palm Springs CREZ. RETI’s online maps fail to provide any useful detail, so local government in the Coachella Valley requested the Arc files for the Coachella Valley and mapped them. The resulting map of the Palm Springs CREZ, (attached) shows that renewable projects and/or transmission lines are proposed within the Santa Rosa and San Jacinto Mountains National Monument, in Conservation Areas designated by the MSHCP/NCCP, in the BLM Whitewater River Area of Critical Environmental Concern, in the Big Morongo Area of Critical Environmental Concern, and in the San Geronio Wilderness. This is unacceptable. Additionally, the maps prepared for eastern portion of the Coachella Valley showed similar intrusions into the Santa Rosa Wilderness, the National Monument, critical endangered bighorn habitat and high value scenic and cultural areas.

The bottom line is that RETI’s environmental ranking system fails to indicate the relative environmental cost of the CREZs as it purports to do. More importantly, the CREZs and associated new transmission facilities are so large and widespread, particularly in the California desert, that their individual and cumulative impacts rise to an ecosystem level. Therefore, ecosystem-level planning must be completed **before** CREZs are chosen, and that level of planning is the only way to properly inform the choice of environmentally preferable locations for CREZs.

Inconsistency

The report makes some mild disclaimers that its environmental process does not substitute for CEQA review and that key criteria such as disturbed lands, cultural resources, and scenic impacts went unresolved. But no mention is made that other major issues raised by environmental organizations went unaddressed. On the contrary, the perception is created that the environmental process was adequate, in statements such as:

“Despite limitations, the methodology developed by the EWG and approved by the SSC described here provides a coherent and consistent means of estimating the relative environmental impacts associated with potential energy development in the CREZs identified by Black & Veatch.”

As outlined above in the environmental ranking discussion, this claim is contested by a number of environmental organizations.

Public participation

RETI's charge is to be open and transparent. However, this was an ongoing problem. The Working Group meetings that formulated the underlying economic assumptions were not publicly noticed. The stakeholders steering committee (SSC) meetings were neither open nor transparent. The SSC meetings repeatedly excluded legitimate environmental representatives while allowing other outside observers. Finally, after several months of this conduct and repeated complaints, the SSC voted to allow observers. Then, with no explanation, this open policy was suspended for the October 8, 2008 SSC meeting. In sum, one cannot fairly characterize the RETI process as open and transparent.

A similar disregard for openness characterized the conduct of the environmental (EWG) meetings. It required repeated requests to get the EWG meetings noticed on the RETI website instead of merely an email list. Additionally, the webex and phone-in system for the EWG meetings was plagued with technical problems, further hindering public participation.

As for the clarity of the report, the CREZ maps are deficient. Per the discussion above re the environmental ranking, it was impossible to define the boundaries, much less assess the relationship of a given CREZ to environmental resources, without the GIS capability to map the CREZ Arc files. In addition, many of the CREZ names are illegible on the most important table, the combined assessment, page ES-7.

Some of the content of the report is ambiguous on major issues. For instance, the report fails to explain why some CREZ were dropped from consideration, simply stating: “Of the 37 California CREZs and sub-CREZs identified by Black & Veatch, only 30 of the most cost effective areas were assessed by the EWG due to technical reasons which could not be resolved in time for this draft report.” The discussions about the creation of sub-

CREZs and also the so-called “shrinkwrapping” of CREZ are likewise uninformative. The text does not explain the rationale behind some of the economic assumptions, including, for example, the Working Group’s decision to assume certain unapproved and un-built transmission lines to be “available,” and at no cost.

Finally, the comment period for the report precludes meaningful public participation. Only two weeks to review and comment on a 300 page technical document is not adequate.

Identification of disturbed lands

One of the greatest areas of controversy in developing renewable energy is the siting of extremely massive solar facilities on natural undisturbed land. Due to its high insolation, the California desert is viewed as a prime area for deployment of solar electrical generating plants. But if these extensive facilities are improperly sited, some of the state’s last major open landscapes and ecosystems, highly valued for their natural, scenic and cultural resources, will be industrialized. Also, there are communities in remote natural desert areas which would be disproportionately impacted by these massive renewable facilities and proposed new high-tension transmission corridors.

As outlined above, originally the RETI effort intended to maximize the use of disturbed lands, but RETI’s Environmental Group failed to identify any significant disturbed acreage for consideration as renewable energy sites. So, recently an ad hoc effort was undertaken to identify and map areas in the California desert, areas that have comparatively low resource value due to disturbance, edge effects or fragmentation. These areas were identified using an opportunities and constraints type analysis as opposed to the arbitrary criteria and numerical ranking employed by RETI.

Publicly available data layers showing known important biologic values, federal and state protective designations, and other sensitivity indicators were mapped (and submitted to RETI some months ago). 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 lower environmental value in proximity to existing transmission were identified.

The identified areas contain high proportions of marginal, non-prime agriculture 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. This would dovetail with the major ecosystem planning effort proposed by the Governor.

Attached is a map of these identified lower value areas. While this coarse analysis does not begin to approach a CEQA level analysis, it does demonstrate one thing. It shows that with minimal effort one can identify large areas of disturbed or degraded acreage in

the California desert, acreage that is located adjacent to existing transmission, avoids known sensitive areas and has far greater odds of environmental acceptance. In fact, this exercise identified many times the acreage that would satisfy RETI's targets for large scale solar projects. And, while the individual tracts in the identified areas may not be as large as public land tracts, most tracts would be usable for solar PV and many exceed the 160-acre minimum size for scalable solar thermal projects.

The California desert is a big place; it simply is not necessary to destroy vast areas of pristine public land and other protected areas to address global warming.

Thank you for the opportunity to comment on the Phase 1B report and the RETI effort in general.

Very truly yours,

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