

RETI Phase II comments summary
July 19, 2009
Carl Zichella

General Summary:

Most commenters support greenhouse gas reduction goals of the state and federal government and the majority believe there is a correct way to address siting and transmitting renewable energy from large scale generators.

There was substantial concern expressed that a greater role is likely for and RETI should take into account a significantly larger role contribution from distributed photovoltaic energy and energy efficiency. Some commenters took issue with RETI estimates of the net short and still others request a more thorough explanation of RETI assumptions in light of the recent CPUC report on meeting California's AB 32 greenhouse gas reduction goals.

One commenter compared California with Spain where a feed-in tariff triggered explosive growth in renewable energy and predicted an enormous increase in locally generated power was in the offing, far in excess of previous official state forecasts and assumptions.

A recurring comment addressed the emphasis on the use of disturbed lands. Several suggested RETI adopt the criteria set forth in a document entitled: "*Renewable Siting Criteria for California Desert Conservation Area*" which was drafted by an ad-hoc group of environmental and desert conservation organizations. In particular, many commenters emphasized the need to look at fallowed or vacant agricultural lands. There is considerable frustration with RETI's limited ability to identify and give priority to such development sites.

A number of commenters complained about the use of proxy projects to identify resource zones and urged that RETI drop the use of proxy projects.

One commenter thought RETI was biased against the wind industry. Another thought RETI assumptions were too lenient on the wind industry and did not fully take into account habitat fragmentation effects.

Several commenters from desert conservation groups advocated for a broadening of the stakeholder steering committee to include local representatives from desert communities. A few complained that RETI was "industry dominated."

A number of organizations had very specific comments regarding individual CREZ. Some were recommended to be dropped while others modified.

The CREZ refinement process needs much more clarification about the use of and quantification of the data from the matrices used to evaluate the Phase IB CREZ a

number of commenters said. They wanted to know how the data were used and what changes were made as a result and to see the explanation in the report's narrative.

The use of experts to help rate transmissions segments was generally well received.

RETI was faulted for not doing more consulting with Native American tribal and other organizations. This shortcoming could be remedied by increasing consultation a Native American commenter said.

Along a similar line a majority commenters urged coordination between federal and state planning efforts and RETI.

Specific concerns were expressed by individual commenters concerned about CREZ locations near their communities in both northern and southern California.

Also common to comments statewide was the need to ensure the lines recommended by RETI are used to transmit renewably generated electricity.

Several commenters were interested in RETI doing an analysis on whether transmission upgrades were needed at all, and one stated the belief that enough line capacity already exists to wheel all northern California renewables to load centers.

Numerous comments addressed ways to improve the understandability and utility of the report. While some liked the maps and urged even more and quite specific maps, others felt the maps in the draft document were confusing and unclear.

Several comments urged that the refinement methodology be substantially more clearly described and that tables and back up materials be cross-referenced to the text.

Summaries of the individual comments follow.

Name: Defenders of Wildlife

Commenter: Jeff Ardahl

Length: Seven pp.

Attachments: None

1. Defenders strongly supports California's greenhouse gas emission reduction and renewable energy utilization goals, and we will continue to work with state and federal agencies and renewable energy companies in identifying socially and environmentally responsible solutions to increasing renewable energy production. Defenders believe that such renewable energy production can and must occur without sacrificing our remaining wildlife resources and values.
2. Pleased to note that the current draft report recognizes that full achievement of energy efficiency program targets and aggressive, continuing expansion of

distributed photovoltaic generation beyond currently adopted state goals will be necessary to meet California's renewable energy goals.

3. Least desirable solution is large scale development on undisturbed desert lands.
4. Refinement/analysis matrices contained in Appendices C and D, along with the report text and new bubble chart do not provide enough definitive information to enable the reader to understand which CREZs and transmission lines were refined and how environmental factors were used to portray the relative numerical ranking of each one, especially in the California Desert. We recommend that the draft map accompanying the Report be modified such that the boundary of each CREZ, as well as those transmission lines that are new or would require expansion of the footprint, are more clearly discernable to the reader.
5. Due to the somewhat complex, intricate and unique nature of conservation commitments contained in the amended CDCA Plan, we highly recommend development and use of a CREZ Refinement Matrix that is specific to the CDCA.
6. Environmental rating factors should reflect the strong mitigation measures required in the CDCA for certain areas established for conservation of numerous animals, plants and their habitats. Will change desirability of many sites.
7. The CDCA Plan contains additional conservation measures that were contained in the original 1980 plan. These measures were in the form of certain designations that required various degrees of land use evaluation and adjustment in order to maintain certain plant and wildlife resources in a desired condition. These include designations such as unusual plant assemblages, HCP areas and Special areas. Matrices should include these.
8. In some cases the units and associated connector or transmission lines affect established conservation areas, various special status species, designated critical habitat, etc., and that some of these units are based almost entirely on hypothetical or proxy projects.
9. Concerns on specific CREZ:
 - a. **CREZ 29 – Imperial East:** We question the potential value designating this CREZ because it is based on a hypothetical wind power project located entirely in a sensitive area. According to the CDCA Plan, the proxy project is located in known raptor nesting and foraging habitat, and a Bighorn Sheep movement corridor through the Pichacho Mountains. This zone is not within the recently announced federal solar energy study areas.
 - b. **CREZ 34 – Needles:** CREZ is associated with one application filed for wind energy plus one proxy wind project. They are located within the Eastern Mojave Recovery Unit and an ACEC for the threatened Desert Tortoise. Considering the 1% development cap for habitat disturbance, and the importance of the Desert Tortoise population in the eastern Mojave region. This zone is not within the recently announced federal solar energy study areas. We believe this CREZ should be deleted.

- c. **CREZ 36 – Riverside East:** CREZ is large and is associated with numerous solar energy right of way applications spanning a large area from Blythe to Desert Center and north toward Eagle Mountain. Wildlife concerns are largely unknown or not identified. There may be wildlife issues associated with some of the solar application areas on the northern fringes of the CREZ. These issues involve raptor foraging areas, Desert Tortoise, Desert Bighorn Sheep movement corridors, and microphyll woodland washes which are extremely important for migratory birds.
- d. **CREZ 37 – Iron Mountain:** Due to the wildlife concerns and remoteness of this CREZ, we strongly urge that this CREZ is deleted from consideration.
- e. **CREZ 40–Mountain Pass:** We recommend deleting this CREZ until such a time as the issues associated with potential renewable energy development in Ivanpah Valley, Mountain Pass, and the Castle Mountains/Lanfair Valley are resolved.
- f. **CREZ 43–Pisgah:** We know from recent involvement in commenting on the proposed Solar I project that many of the proposed solar and wind projects within the Pisgah CREZ that significant wildlife issues will surface. We believe a Pisgah CREZ should be considerably reduced in size in order to avoid or reduce some of the significant wildlife issues. A revised boundary should generally include the area associated with and between Interstate 40 and the railroad to the north.
- g. **CREZ 45–Barstow:** This CREZ should clearly be eliminated due to numerous, significant conflicts with natural and cultural resources. All proxy projects in the area should be eliminated as well as the electrical collector lines linking proxy solar projects inside the boundary of the National Training Center at Fort Irwin. This zone is not within the recently announced federal solar energy study areas.
- h. **CREZ 46–Victorville:** Although we don't object to a CREZ in this area, we believe it is overly large and based on a number of proxy wind and solar projects that would entail significant conflict with designated conservation areas. The proxy projects within all of the sensitive wildlife resources areas should be eliminated, and the size of the CREZ greatly reduced and centered on degraded lands, most of which are in private ownership. This zone is not within the recently announced federal solar energy study areas.
- i. **CREZ 50–Kramer:** The solar proxy project area located within the Desert Tortoise Research Natural Area should be eliminated as well as those within the Mohave Ground Squirrel Core Population which is associated to a large extent with the Natural Area. We recommend removing the solar proxy project area located immediately north of what appears to be a dashed green line depicting the southern boundary of the Fremont-Kramer DWMA or the Western Rand Mountains ACEC. The one geothermal proxy project located east of Randsburg is very likely Steam Well, an old and abandoned geothermal test well that is now located within the Squaw Spring ACEC and the Golden Valley Wilderness. It is located entirely within critical habitat for the Desert Tortoise and is part

of the Fremont-Kramer DWMA. This proxy site and associated connector line should be eliminated. This zone is not within the recently announced federal solar energy study areas.

- j. **CREZ 51–Inyokern:** This CREZ is reasonable considering the amount of potentially available private and federal land in the area that has low biological values or is in a disturbed condition.
 - i. The area consisting of private and federal land located between Ridgecrest and Inyokern and from Bowman Road north to the Inyo County line should be studied for solar energy development potential.
 - ii. We also recommend consideration of portions of the southwestern area of the China Lake Naval Air Weapons Station.
 - iii. However, we strongly recommend removing the RETI electrical connector line linking the Inyokern substation to a potential wind power project west of State Route 14, and reducing the CREZ by moving the boundary to the Redrock–Inyokern Road. This would eliminate portions of the CREZ within the Mohave Ground Squirrel Conservation Area and Core Population area as well as the Jawbone-Butterbrecht ACEC located west of State Route 14. This zone is not within the recently announced federal solar energy study areas.
- k. **CREZ 52–Tehachapi:** This CREZ should be modified by eliminating the proxy project area located within the Desert Tortoise Research Natural Area and the associated Mohave Ground Squirrel Core Population. Wind proxy projects located within the Jawbone-Butterbrecht ACEC should also be eliminated for a variety of reasons; the area was designated in 1980 because of its important wildlife resources. We strongly recommend eliminating the portion of this CREZ within the ACEC. This zone is not within the recently announced federal solar energy study areas.

10. Transmission and collector line descriptions and evaluations are extremely abbreviated. Of greatest concern to Defenders are the proposed new transmission and connector lines, and those transmission lines that would require significant upgrade with a larger footprint. The complexity of the draft map, combined with multiple color layers for various mapped features and small print made review and analysis of the transmission lines extremely difficult or impossible. Further complicating our ability to provide meaningful comments is the lack of a separate map for transmission and connector lines in relationship to designated conservation areas, special status species occurrences, designated critical habitat, etc.

11. We urge the RETI team to fully explore alternatives to the new transmission lines rather than simply identifying one preferred location associated with the most direct route and lowest cost. Maximum use of existing corridors, combined with co-located facilities should be the guiding principle in transmission line proposals. Alternatives, even though less direct and more costly, should be identified, disclosed and available for future consideration.

12. Alarming high numbers for transmission line projects having serious environmental problems necessitates that an in-depth analysis of alternatives including the use of existing rights of way and developed corridors be performed and provided to the public for further review and comment.
13. Urge the concept of proxy projects be eliminated.
14. Not enough emphasis on disturbed lands and few proxy projects were designated on disturbed lands. Within the CDCA.
15. Parcelization standard of 20 owners per two square miles too small. Shifts development pressure to the public lands. Land consolidation strategy is of the highest urgency and importance.
16. Need to coordinate review with federal and state efforts.

Name: Amargosa Conservancy:

Commenter: Brian Brown, Resource Advocate.

Length: Five pages.

Attachments: none

1. The Amargosa Conservancy strongly supports major increases in renewable energy generation, but only if sited and operated to minimize harm to natural communities
2. (W)e believe that new energy infrastructure more than adequate to meet California's renewable portfolio standards (RPS) can be added without further imperiling already threatened desert biodiversity, scarce natural and scenic resources and the struggling human communities.
3. We believe that RETI should fully adopt a "least regrets" analytical path that accelerates approval for projects that are clearly ecologically as well as economically optimal. This means, for example, placing projects in the front of the queue that would use disturbed lands, existing transmission infrastructure, and water saving technology, and denying accelerated handling of those projects that have asserted priority simply because they were first to request sites on public lands.
4. Existing transmission capabilities must be determined. An alternative case should be prepared to explore capacity availability regardless of line ownership.
5. Land use criteria must be reevaluated. Analyze use of alternatives like D-G and focus on sites disturbed including agricultural. Ownership fragmentation criteria (20 per two square miles) too restrictive.
6. Future cooperation with other initiatives and organizations needs to be clarified, DCREP and federal process especially; how will these intersect?
7. Out of state resources must be compared. Some may not comply with RETI assumptions of air cooling. BLM not coordinating across state lines.
8. Scenic and cultural Values not adequately considered. Needs to be addressed.

Name: Audubon California

Commenter: Dan Taylor

Length: Seven pages

Attachments: none

1. Audubon California strongly supports our state's greenhouse gas emission reduction and renewable energy standards, and we will continue to work

with state and federal agencies and renewable energy companies in identifying environmentally responsible solutions to increasing renewable energy production. We believe that such renewable energy production can and must occur without sacrificing our remaining wildlife resources and values.

2. Conservation and D-G first considerations, last, but still necessary option, is to build large scale renewable solar energy projects on public land and undisturbed private lands in the California Desert and other often remote areas in California that contain important natural plant and animal communities.
3. Refinement/analysis matrices: See Defenders Comment
4. Environmental rating factors: See Defenders Comment.
5. Must thoroughly analyze each CREZ and transmission line, including collector lines, in the final Report. This would significantly alter some of the environmental rankings contained in the Report and ultimately result in some CREZ and transmission lines being dropped from consideration.
6. IBA data provide via website several CREZ affect these.
 - a. **CREZ 18 – Carrizo South** -- CREZ overlays with the Carrizo Plain IBA which encompasses one of the most significant swaths of protected lands in the state.
 - b. **CREZ 25 – Owens Valley** -- CREZ overlaps with the riparian habitats associated Owens River among the most extensive in the state.
 - c. **CREZ 31 – Imperial North** -- The largest California populations of several species occur here, including 30-40% of the global population of wintering Mountain Plover, 70% the state's Burrowing Owls, and the only California population of Gila Woodpecker away from the Colorado River. Agricultural fields and irrigation canals provide habitat.
 - d. **CREZ 40 – Mountain Pass** -- is associated with the East Mojave Peaks IBA that includes relatively lush Joshua Tree woodland on the lower slopes of these peaks support strong populations of desert birds.
 - e. **CREZ 47 – Fairmont** -- includes in its western extent portions of the Antelope Valley IBA. This IBA is seeing rapid transformation from an agricultural/wildland landscape to an urban zone of tract homes and planted trees.
 - f. **CREZ 52 – Tehachapi** -- This CREZ should be modified by eliminating the proxy project area located within the Desert Tortoise Research Natural Area and the associated Mohave Ground Squirrel Core Population. Wind proxy projects located within the Jawbone-Butterbrecht ACEC should also be eliminated for a variety of reasons; the area was designated in 1980 because of its important wildlife resources including the Mohave Ground Squirrel and raptors (Golden Eagle, Red-tailed Hawk, Prairie Falcon, Burrowing Owl). We strongly recommend eliminating the portion of this CREZ within the ACEC.

7. Fully explore alternatives to the new transmission lines. Maximum use of existing corridors, combined with co-located facilities should be the guiding principle in transmission line proposals. Alternatives, even though less direct and more costly, should be identified, disclosed and available for future consideration.
8. **Proxy Projects:** We do not agree with the use of proxy projects on lands as this practice is highly speculative and artificially inflates the energy production valuation of the individual CREZs, making some score higher in the rankings even if they lack actual interest.
9. **Failure to Prioritize Disturbed Lands:** We believe that, at the outset, the RETI process and work products suffer from a fundamental flaw: the absence of a directive or mandate requiring that previously disturbed and degraded lands be considered to the maximum practicable degree for renewable energy production and transmission.
10. **Private Land Parcel Issue:** The criterion that private lands need fewer than 20 separate owners per two square-miles to be considered viable for renewable energy development should be changed to a higher number.
11. Develop and implement a strategy at all levels of government to consolidate disturbed or degraded private lands, regardless of parcel size, for exclusive use as renewable energy production zones.
12. Coordinate with Federal and DCREP processes.

Name: Bighorn-Desert View Water Agency

Commenter: Marina D. West

Length: Two pp.

Attachments: Yes, locator map

1. A RETI CREZ boundary exists within the Bighorn-Desert View Water Agency service area (see attached map) and this CREZ is associated with solar lease applications along Highway 247 near the community of Johnson Valley.
2. CREZ Refinement Matrix is silent regarding water resource availability and impacts related to the development of large scale solar fields.
3. Groundwater resources tapped for large scale solar energy development is not a beneficial use of the public trust resource managed by BDVWA for the citizens of this community. It is simply a trade, green power in exchange for groundwater depletion.
4. Request that CREZ 44 be reevaluated in light of the lack of groundwater resources and be dropped from the RETI and off the associated maps.

Name: Bill Powers

Commenter: Bill Powers

Length: five pp, including letter to editor San Diego U-T; Article PV Tech trade publication.

Attachments: included in email comment

1. Spain and California have similar populations so California should be able to match Spain's progress. Spain has a feed-in tariff.

2. San Diego should be able to install more than 2,000 MW of PV distributed solar by 2020
3. San Diego does not need new transmission for remote renewable power, already has the line capacity.
4. Remote wind is not cheaper than distributed PV in San Diego

Name: California Desert Coalition

Commenter: Ruth Reiman

Length: 6 pp. including attachments

Attachments: Renewable Siting Criteria for California Desert Conservation Area

1. RETI Stakeholder Steering Committee (SSC) is dominated by industry representatives, and those stakeholders most affected by RETI decisions have been left out of the process. No locals on SSC.
2. RETI discounts D-G as a solution
3. RETI has overstated the need for large transmission-dependent renewable projects.
4. Only after other avenues are exhausted should we build large scale RE. Then we urge RETI to utilize the siting criteria provided in the consensus environmental document "Renewable Siting Criteria for California Desert Conservation Area."
5. CDC questions the advisability of RETI including the Green Path North transmission project in its conceptual transmission planning. However, CDC is encouraged that RETI chose to use the Green Path North routing alternative A in its screening process. This is the CDC-recommended alternative alignment along Interstate 10 that follows an existing transmission corridor. This route could share or expand upon an existing Southern California Edison (SCE) right-of-way through developed areas. For this reason, it is not understandable that in Appendix D, the two segments that constitute this route, Devers to Victorville (foundation line) and Devers to Century, received an Environmental Concern rating of High.
6. We specifically request that you abandon from consideration in your transmission planning the Green Path North preferred alignment, routing alternative C (and its extension D).
7. CDC concurs with RETI's recommendation that California planning authorities should "work closely with one another to identify, propose, study and approve joint IOU-POU projects, and eliminate barriers to joint use of such facilities."

Name: Center for Biological Diversity

Commenter: Ileene Anderson

Length: Seven pp.

Attachments: None

1. according to RETI's own mapping, some of the pre-identified projects are located in areas with substantial environmental constraints (for example, core areas for Mohave ground squirrel [a state-listed endangered species] inside of the Mohave ground squirrel conservation area, private lands conservation areas [Desert Tortoise Natural Area], Desert Wildlife Management Areas, Significant Ecological Areas as identified by Los Angeles County and others). These areas

- are unsuitable for development of industrial scale renewable projects based on the substantial conservation values.
2. Analysis should start with exclusion areas; mapping all pre-identified projects, even if sited in sensitive areas off limits to development creates the environmental conflicts RETI sought to avoid. Using these and proxy projects to frame the zones is backwards.
 3. Proposed CREZs in the report increase fragmentation of the landscape not only from the projects themselves, but also from the additional transmission lines.
 4. Some of the proposed CREZ cover long linear expanses to serve proxy projects that to date have even been seen as undesirable from the industry point of view, creating unnecessary fragmentation. These configurations need to be rethought to reduce fragmentation.
 5. Proposed CREZs should look at clustering the renewable energy areas around existing energy corridors instead of creating a series of tentacle-like extensions to each pre-identified and proxy project area. Minimizing the edge-to-area ratio of the proposed CREZs would help to minimize fragmentation of the landscape.
 6. Mapping still needs improvements. Text does not perfectly correspond to maps. Some features are misidentified. Some lines incorrectly cross protected areas.
 7. The “disturbed areas” also need further additions to fully capture the lands that have been previously developed or disturbed. Examples in Imperial cited. it speculatively
 8. The report assumes that wind energy projects on-the-ground impacts are limited to 7.5% of the project area. This scenario fails to take into account the impact of fragmentation, service roads, staging areas, fencing requirements and how those impacts affect species persistence.
 9. No CREZ should be located within critical habitat or areas of critical environmental concern (including DWMA and conservation areas), based on conflicts with current land management plans and other laws, as well as the inability to adequately mitigate impacts. It is also unacceptable for the proposed CREZs to include national parks lands, federally designated wilderness areas or wilderness study areas.
 10. Private lands which have significant prior development or disturbance and which are therefore less environmentally sensitive need to be considered in the RETI process and there should be an “equitable competition” with undisturbed public lands with intact habitats and sensitive environmental resources.
 11. We fail to see the justification for eliminating areas based on the arbitrary maximum limit of 20 parcels per 2 square mile area. Privately-owned conservation areas have been assembled with a much greater parcelization ratio (ex. the Desert Tortoise Natural Area).
 12. The refinement process does not appear to recalculate the “score” based on filling in additional data gaps or including new data regarding environmental concerns. In addition to the resources identified in our previous comments, the U.S. Geological Survey recently published desert tortoise habitat data and a model that needs to be incorporated into future CREZ refinements (see <http://www.usgs.gov/newsroom/article.asp?ID=2223>) along with the other data and information that has been provided but ignored.

13. In order to facilitate permitting to get renewable energy on-line, the RETI process must propose only CREZs and supporting transmission that are actually feasible. Some of the CREZ and transmission projects proposed in Phase 2A still have potentially significant environmental impacts that may make them unmitigable and these projects unfeasible. This will delay project development.
14. RETI uses data to combine the CREZ energy, CREZ economics, CREZ environmental concerns and CREZ commercial interest seems to heavily weight the resulting “combined energy score” to the economic side of the issue (at pg. 3-47) and marginalize the potential heavy environmental costs.
15. Renewable energy lines should only be use to move renewable energy. Renewable delivery lines and renewable collector lines must have conditions placed on them to ensure the line is used exclusively for renewable energy. Failure to require the lines to exclusively carry renewable energy will fail to meet RETI objectives.
16. Greenpath North should be evaluated along the Highway 10 corridor only.
17. Renewable energy development is not the only development happening in the desert and cumulative impacts need to be considered.

Name: California Wilderness Coalition
Commenter: Monica Argandoña
Length: Seven pp.
Attachments: none

General Comment: Follows Defenders virtually word for word.

Name: Save the Foothills Coalition
Commenter: Charles Ashley
Length: 2 pp
Attachments: None

1. It would have been better to map only straight-line segments (obviously only conceptual) rather than the “faux realistic” segments, if you will, that actually appear on the map published by the CEC on June 17, 2009
2. While the Gregg Substation probably offers the best point to tie into the foundation line through Central California (assuming that a highly centralized solution is the best means to meet the RPS goals), it is more than blatantly obvious that a plan siting a 500 kilovolt (or possibly a 765 kV) DCTL through densely populated urban and suburban areas would never be approved.
3. Matrix could have had more categories such as densely populated areas.

Name: Chumash MLD
Commenter: Frank Arredondo
Length: 9 pp
Attachments: None

1. The lack of consultation with Native Americans, the lack of use of the current statewide data on Native American sites and the lack of the SSC members and their respective institutions to address gaps and policy conflicts not to mention the need for a methodology to be developed for consideration of potential

- impacts on these sites by CREZ development. I strongly suggest that the deficiencies are addressed with the inclusion of Tribal consultation.
2. It appears in my review that the environmental impact is being ignored to facilitate the economic cost as well as the amount of transmission facilities.
 3. On-the-ground evaluation of permitting and project developability issues need the review and input from the local Native American groups to help identify and mitigate a resource in order to lesson its impact. This invaluable input from the communities will assist in the more accurate basis for estimating the development issues in those areas.
 4. Numerical ratings are intended only to indicate relative levels of concern and have been used for the limited purpose of comparing CREZs but they do not fully reflect the potential impact to cultural sites. This would greatly change the levels of concern and the purpose of comparing CREZs.
 5. The recommendation made by the RETI's Environmental Work Group (EWG) on unresolved issues and recommendations 1.2.6 of the phase 1b, was to collect statewide data on Native American sites and create a methodology for consideration of potential impacts on these sites by CREZ development. This was to be considered in the phase 2, but it has not.
 6. RETI's focus on Native American lands refers to federally recognized Tribes land bases. This does not address non-federal cultural properties and sites of sacredness.
 7. The overall impact to not addressing the Native American cultural sites and Native American Concerns will directly impact the benefit to cost analysis, the relative usefulness of lines and groups of lines will reduce the ratings, as well as transmission cost. The Phase's development can and will be delayed.
 8. BLM's participation triggers a host of responsibilities under the agency's code of federal regulation and operational manuals.
 9. Local planners cannot cope with the pressures of statewide resource planning and mitigation may be overlooked or inadequate.
 10. What is needed is the fundamental decision on the part of the RETI plan and SSC members to share some decision-making power with Native Americans. Identify, prioritize, Management Practice, Long-term Planning and Monitoring.

Name: Cogentrix

Commenter: Gary Palo

Length: 3pp

Attachments: none

1. The Mountain Pass line group is the only renewable collector line in Southern California that provides a direct interconnection to out-of-state renewable energy resources.
2. The Mountain Pass line group is located within a designated energy corridor, and the majority of the proposed line would be a replacement for an existing transmission line, which should be reflected in a high environmental preference and relatively low environmental concerns due to the existing transmission line corridor and rights of way.

3. Mountain Pass line group and the CREZs that would be served by that line are unaffected by the uncertainties associated with the proposed Mojave Desert National Monument.
4. Mountain Pass line group should be accorded a higher priority and recommended for immediate study by CAISO.

Name: Ed Marek

Commenter: Ed Marek

Length: 3 pp

Attachments: none

1. The costs, both environmental and economic, of building the two north and northeast California lines may have been understated, and the benefits overstated.
2. Northern and Northeastern lines are currently shown as requiring new right-of-ways, the recent adverse public reaction to the TANC project may also indicate much higher costs in acquiring any new ROW's, if obtainable at all.
3. Transmission capacity may already exist for northern California CREZ.
4. Medicine Lake Highlands geothermal site, designated as Round Mountain A. has been the subject of environmental litigation for many years, and is sacred to several Native American tribes, so the positive CREZ environmental rating given by RETI 2A is questionable.
5. The Northeast trunk line, as described in RETI 1B and 2A, has no defined purpose.
6. Further interstate transmission line development through Northern California would not be useful. Such lines could impede the central objective of RETI, the reduction of CO2 pollution produced in the generation, transmission, and delivery, of energy consumed in California
7. Increased energy conservation efforts, and the substitution of natural gas, both in end use (combustion) and for in-state electricity generation, as substitutes for transmission line electricity, are some examples of alternatives which RETI has not addressed. While these considerations seem to have been largely outside the RETI process, total demand and net short are both subject to reduction by these and other factors, so they should be re-examined.
8. Natural gas price assumptions are not current.
9. RETI assumptions of increasing California total electricity demand, and the net short calculations, have not been adjusted for current and future, energy market conditions. While energy demand probably will increase in the near future, electricity transmission demand probably will not. This may eliminate the need for more marginal proposals, such as the North and Northeast transmission line,

Name: Green Energy Express

Commenter: Gary Brown

Length: 3pp

Attachments: none

1. GEET project is not redundant.
2. We believe it's premature to conclude that any proposed transmission project is needed, not needed, redundant or otherwise until the CAISO Planning process has finalized their analysis and have determined the need of any proposed transmission project. We therefore respectfully request that the Riverside Group section on page 3-52 be clarified and revised accordingly.
3. Do not see conflict with MWD projects. GEET will increase reliability.

Name: Green Power Institute

Commenter: Greg Morris

Length: 2 pp

Attachments: none

1. I believe we are doing harm to the renewables cause by failing to emphasize sufficiently that the conceptual transmission plan we have constructed is not entirely, or even primarily, attributable to the development of renewables in California. That is, we ought to emphasize from the opening that California's existing transmission system is inadequate for today's needs, and seriously inadequate for the state's future needs, regardless of what the future mix of generating sources might be, renewable or otherwise.
2. The RETI conceptual plan should **not** be represented as being renewables-specific costs at all.
3. I propose adding the following paragraph in the middle of page 1-2, before the paragraph beginning, "The conceptual transmission plan ...":

California's transmission system is not adequate for serving the state's energy needs today. Regardless of whether the state pursues a renewables-rich future, or any other future energy-supply mix, large investments in transmission infrastructure will be needed between now and 2020. The RETI phase 2A report presents a comprehensive conceptual-transmission scenario that is designed to facilitate meeting the state's policy goal of 33-percent renewables by 2020. The conceptual transmission plan presented in this report is one possible scenario for the future development of California's electricity system. Many of the elements of the RETI conceptual plan would be required by other (non-renewables-based) future scenarios. Thus, the cost estimates presented in this report for the RETI phase 2A conceptual transmission plan are not costs that should be interpreted as being a direct result of the state's renewable-energy programs. That cost, if there is any, could only be determined by comparing the RETI scenario with alternative comprehensive conceptual-transmission scenarios for the development of the state's electricity grid

4. RETI's objective methodology does not completely replace the use of expert judgment in the planning process, but rather combines elements of expert judgment with elements of analytical analysis within a transparent framework that helps to elucidate the ranking process for both planners and the public

Name: California-Nevada Desert Committee

Commenter: Joan Taylor

Length: 10 pp

Attachments: CPUC Impacts of AB 32 report.

1. RETI's Steering committee is not representative and excludes desert interests.
2. Economic concerns outweigh environmental ones. Not a balanced approach.
3. RETI environmental analyses are confusing. Contrived, counter-intuitive, and lacks conservation biology value.
4. Any conflict with one of the eight criteria should disqualify a CREZ.
5. Having eight criteria diminished the importance of any single criterion.
6. New methodology for CREZ refinement is prejudicial to environmental concerns.
7. RETI should substitute "*Renewable Siting Criteria for California Desert Conservation Area*" document for environmental review in RETI
8. Transmission ranking was superior to CREZ refinement but needs clarification. The report should clearly spell out how the numerical rankings were determined.
9. RETI should recommend for study only those routes reviewed by the expert panel.
10. Sunrise Powerlink is not on the maps.
11. RETI should use designated federal corridors , avoid GPN preferred route, and avoid conflicts with Joshua Tree NP.
12. RETI puts too much emphasis on large-scale and thermal technologies.
13. More analysis is needed to explore a high D-G scenario as recommended by the CPUC.
14. RETI's analysis of constraints to D-G PV development contains numerous errors.
15. Are RETI's solar thermal with storage estimates accurate? Where do they come from and are they based on operational experience?
16. RETI should consider insolation values lower than 6 and consider the Central Valley more.
17. RETI is biased against wind in favor of solar.
18. RETI's net short is still too high.
19. Why can't utilities count D-G toward the RPS?
20. RETI CRFEZ should be refocused more intensively on disturbed lands.
21. RETI needs to better consider intermediate (20MW and up) PV projects closer to load in its analysis of the potential for using PV to meet the RPS.
22. RETI overstates the need for large scale technologies but there is a place for them if sited properly.

Name: Joe Ross (please withhold mailing address from public disclosure)

Commenter: Joe Ross

Length: 5 pp

Attachments: three -- federal; register notices and map of BLM/DOE PEIS

1. It will be very ambitious to meet the RETI deadlines.
2. Key public review milestones and dates should be clearly and prominently announced on the RETI homepage and in the project calendar posted there.

3. California Energy Commission should be more proactive in contacting key statewide media outlets (newspaper, radio, television) to build public understanding of the RETI process and announce key dates for public involvement.
4. California Energy Commission should do more community outreach and host public meetings to build public awareness and encourage discussion about the RETI.
5. Components of the State's energy development leadership should be acknowledged in the final RETI reports.
6. I would like to see an all-encompassing coordinated plan for all applicable agencies to efficiently work together to avoid redundancies and cut the red tape without ignoring laws, regulations, and their mandated responsibilities.
7. I feel that the Draft Phase 2A Report does an above average job of:
 - a. expanding and refining the analysis of priority CREZs;
 - b. identifying potential issues for generation siting and transmission;
 - c. preparing development resource mix scenarios;
 - d. modeling capacity expansion;
 - e. developing conceptual transmission plans
8. RETI should update its April, 2008 mission statement to spell out its intent with regard to a Phase 2B Report.
9. The report should further expound on how the potential transmission corridors will be considered in the future under the Energy Commission SB1059 designation process.
10. Final report should be clear in its relationship and conformity with the Final Programmatic EIS for wind development.
11. Final report should acknowledge current development of a PEIS for solar development in a 6-state region and should also address how conformity will be achieved. The same holds true for other planning efforts in the region (e.g. Western renewable Energy Zones in a 17-state region, Westwide Energy corridors EIS). BLM, in cooperation with the Forest Service and DOE, recently completed the Westwide Energy Corridor Programmatic Environmental Impact Statement process, pursuant to the Energy Policy Act of 2005. RETI should acknowledge, ensure consistency and build upon that effort.
12. Regarding your map, I note that the legend has the "BLM solar lease application" and "BLM wind lease application" color-coded crosshatching reversed what is actually shown on the map.
13. Designated recreation areas like OHV areas should have been one of the EWG ranking criteria.
14. Please clearly explain why some delineated CREZ boundaries have collector lines shown, and some do not?
15. I would encourage you to include various land users such as miners and OHV enthusiasts on your SSC, EWG and other committees and subcommittees.

Name: Joyce Berube
Commenter: Joyce Berube
Length: 3 pp
Attachments: None

1. RETI is doing FERC's bidding and is not sincere about addressing climate change.
2. RETI is a "MUSE."
3. Locally generated power is better than large scale renewable energy.
4. Solutions should be swift, intelligent, fulfill the need for change and be long lasting.
5. Storage technologies should be explored.

Name: Kell Brigan

Commenter: Kell Brigan

Length: 2 pp

Attachments: none

1. Why haven't residents in or near areas being considered for development been contacted?
2. Definitions of "resource quality" are extraordinarily subjective and general, and include no mention of the impact on quality of life for residents and business owners in these areas.
3. Are the "plans" being considered now ever going to be subject to standard Environmental Impact Reporting, including requirements for public notification and comment?
4. Why has no one involved in RETI told the Governor and the President that they're wasting time and money attempting to steamroll through this process?
5. Why aren't smaller-scale projects within urban and suburban areas being considered?
6. Why aren't Arizona and Mexico being involved, as Out-of-State Resources?

Name: Mojave Desert Land Trust

Commenter: Pat Flanagan

Length: 2 pp

Attachments: none

1. The Marine Corps, Joshua Tree NP and the MDLT have collaborated on identifying landscape linkages to preserve connections for wildlife
2. The science guiding our joint efforts includes the recently completed *A Linkage Design for the Joshua Tree-Twenty-nine Palms Connection* (December 2008)
3. Large scale solar installations within the linkage design would significantly impact its quality and compromise the long term goals of the connection. I was unaware that RETI and the EWG did not have this information and pleased that this lack has been remedied.
4. The Morongo Basin is especially sensitive and development there should be avoided.

Name: Rockney Compton

Commenter: Rockney Compton

Length: 1 pp.

Attachments: None

1. Data from Calpine should not be blindly trusted.
2. Originally, the Lassen CREZ was a single entity which the TANC TTP was to access for "clean renewables". Later it was broken into 6 segments (Round Mt. A, Round Mt. B, Lassen Na, Lassen N b, Lassen Sa, Lassen S b). If that were not confusing enough, CEC maps show proposed transmission lines accessing Medicine Lake Highlands (Round Mt. A) that have nothing to do with the Lassen CREZ and the TANC TTP. Part of this confusion is no doubt due to the close relationship TANC and its members have had with CEC and the RETI group.

Name: The Wilderness Society

Commenter: Alice Bond

Length: 6 pp

Attachments:

1. The nation must be repowered with new renewable energy technologies at the small and large scales. California harbors substantial wind, solar, and geothermal resources. Developing some of these resources will be important in creating a sustainable energy economy and combating climate change, and The Wilderness Society supports such responsible development of renewable energy. Renewable resource development is not appropriate everywhere on the public lands and development that does occur on the public lands should take place in a responsible manner.
2. We strongly urge the CEC to prioritize and help guide renewable energy development toward land that has already been developed for industrial, agricultural, or other intensive human uses which are close to existing transmission over ecologically-intact public lands.
3. In addition, our organization has worked with other members of the environmental community in California to develop criteria for use in identifying appropriate areas for development in the COCA as well as a vision for both the kind of planning and the kind of plan needed to protect the desert's remarkable resources while addressing the climate challenge effectively: *Renewable Siting Criteria for California Desert Conservation Area*.
4. It is unclear how RETI actually intends to prioritize development of the CREZ. Additionally, a table showing relative rankings of the CREZ would be useful.
5. Will RETI plan for the development of all CREZ, regardless of their ranking?
6. While it is clear that a significant amount of research was employed to reevaluate the CREZ environmental and economic scores, lack of information on how these new rankings will be used is concerning. The omission of this discussion should be addressed, as the prioritization of CREZ is an important factor in appropriate development.
7. We greatly appreciate the effort made to refine the CREZ boundaries. The corrections made to CREZ in Phase 2, such as removing projects in places that could not be developed due to regulatory limitations and removing proxy projects that had been incorrectly located in category II lands, are improvements. We recommend that the draft maps identifying the CREZ and other data layers be modified so the boundary of each CREZ is clearer to the public.

8. We ask that the report explain how the CREZ were refined and specifically how they were refined due to environmental factors. There also needs to be a narrative provided for each CREZ that provides a rationale for the decision to either refine or not refine the CREZ.
9. The following CREZ overlap with Citizens' Proposed Wilderness Areas: CREZ 1 Lassen South, CREZ 2 - Lassen North, CREZ 26 - San Diego North Central, CREZ 37 Iron Mountain, and CREZ 52 - Tehachapi. We ask that Citizens' Proposed Wilderness Areas be excluded from the CREZ boundaries. It is unclear from the printed maps, but it appears that there are also Citizens' Proposed Wilderness Areas included in CREZ 3 - Round Mountain. This is not reflected in the matrix.
10. Iron Mountain includes approximately 60,000 acres of Citizens' Proposed Wilderness Areas - the largest area of Citizens' Proposed Wilderness Areas included in any CREZ. These areas should be excluded from the CREZ or, at the very least; the environmental ranking of this CREZ should reflect the inclusion of such a large area of undisturbed, pristine land.
11. Based on a review of the recently released maps and the CREZ Environmental Issues Matrices, there appears to be CREZ within Mojave Ground Squirrel Conservation Areas, but there is no discussion of Mojave Ground Squirrel habitat found in the report.
12. More information about wildlife corridors needs to be incorporated into the RETI process. Mapping efforts showing key linkages are improving and should be factored in as they are developed.
13. RETI should prioritize renewable energy development on "disturbed lands" - disturbed lands should include lands that have undergone intensive human activity such as brown field sites, industrial sites, and agricultural lands.
14. Land Parcelization (see Defenders Comment)
15. Transmission planning: (See Defenders comment)

Name: Wildlands Conservancy

Commenter: April Sall

Length: 7 pp.

Attachments: Renewable Energy Siting Criteria

1. The Wildlands Conservancy participated in the largest land acquisition project known in American history, The Catellus Land Purchase. Over 600,000 acres were purchased with \$40 million in private monies for conservation purposes and gifted to the DOI for management with the understanding that they would be preserved for conservation purposes. These lands are located between the Mojave National Preserve and Joshua Tree National Park.
2. Public Comment Period: We appreciate the extension of the public comment period, however, would like to state again that this was still not enough time to properly review the Phase 2A document and maps to provide thorough comments. Since the maps and their data layers are critical to our ability to provide meaningful and adequate comments/suggestions to the RETI, sufficient time is necessary for proper review given the development RETI is encouraging in the fragile desert.

3. There is still no direct representation of desert stakeholders including local government or environmental entities in the voting and steering committee. San Bernardino and Riverside Counties encompass most of the renewable energy applications and thus transmission planning, yet have not been appropriately represented or consulted.
4. RETI only identified areas that prohibit development and are protected by law or policy and thus other conservation investments and ecological and wildlife corridors where implied to be developable.
5. CREZ's are based almost exclusively on existing BLM Right-of-Way (ROW) applications which reflects only the desire of industry seeking to maximize profits. Although these lands may have high solarity and be federally owned, the majority have been poorly sited (for a variety of reasons) and should not be used by RETI, which claims to not be endorsing specific projects.
6. We urge you to revise these CREZ boundaries based on actual land attributes, prioritizing disturbed lands instead of using BLM ROW applications.
7. CREZ Revisions: We are most concerned about the CREZ that still exist in the core of the desert and adjacent to the proposed National Monument boundary between the Mojave National Preserve and Joshua Tree National Park, which include TWC purchased Catellus lands. These include: CREZ 43 Pisgah (where it exists east of Troy Dry Lake), CREZ 37 Iron Mountain, CREZ 38 29 Palms.
8. There is no information in the report as to what data was used to arrive at the results displayed in the bubble charts or table and matrices of economic and environmental scores.
9. We strongly urge you to further consider private and disturbed/degraded lands that are close to existing transmission for potential CREZ to meet our state's RPS goals, as these are the most appropriate places for utility-scale solar development.
10. Proxy projects: (See Defenders comment)
11. Citizens Wilderness (See The Wilderness Society Comment)
12. It is not sensible to equate environmental values and concerns to numbers; concepts are not finite and cannot be limited numerically.
13. Environmental ranking scores: The use of a numerical system rather than one that is narrative is not sensible.
14. RETI needs to revisit the contribution of Photovoltaic (PV) and distributed generation (DG) as the current figures underplay the value of DG. Once the state accurately assesses the contribution to the RPS goals that can be reached through DG and energy efficiency (i.e. AB-811) then, and only then, we can evaluate the role of large, utility scale renewable projects.
15. RETI needs to encourage and continue researching cutting-edge technologies as they come on-line for energy transmission, i.e. superconductors, DC, etc.
16. Power Purchase Agreement timeline: We understand that the Power Purchase Agreements have been written for 20 year period. What is the current plan for how approved and built projects will be treated beyond that benchmark?
17. The CREZ maps are bogged down with layers and the different features are poorly represented by the color scheme.
18. BLM 1% Development caps (See Defenders comment)

19. Why are fallowed farmlands being left out of the CREZ identification in the RETI process when many of these areas are the most appropriate places for such developments
20. San Bernardino and Riverside counties may be willing to help in the identification and mapping of private lands
21. The development of large-scale utility solar farms on pristine desert lands will require blading of land, which will destroy the natural cryptobiotic soil crusts that function to stabilize soil, provide essential nutrients to native plants, and create a barrier to seeds of invasive plants

Name: John Moore

Commenter: John Moore

Length: 4 pp

Attachments: none

1. Cross-referencing: No opportunity to insert cross-references should be overlooked. Merely for example: 1) the boxes in the flow chart should be cross-referenced to relevant text and tables; 2) sheets 11-14 in Appendix A report the values of line segment criteria; the sheet names should include references to the criteria.
2. Formulas: The authors should make sure that every formula used to calculate reported values is displayed and fully explained in the report.
3. Improving the displays of line segment data: The organization of the line segments by function into transmission groups is eminently sensible and clarifies the plan significantly. All the displays of line segment data - spreadsheets, tables, etc. - in the report and in the supplementing materials should likewise be organized by transmission group. Ordering the displays by transmission group would make the spreadsheets, etc., vastly more readable and interpretable. Keys would be concatenations of identifiers (numerical might be simplest) of the transmission group, subset, and line segment or substation. Line segments and substations would have to be assigned values that would sort them in the correct geographically consecutive order. Optimistically, rows and columns of tables can be sorted on the key by the software that created them.
4. The usefulness of the environmental scores of line segments can be questioned for at least two different reasons: 1) the metrics are unfortunately and inevitably arbitrary, and 2) the segments are conceptual and not exact alignments.
5. The sets of values of are arbitrary enough that relative values of the environmental scores may be unlikely to furnish very reliable comparisons.
6. The conceptual nature of the segments may not have such a large effect on usefulness of scores, at least for the many segments that involve existing lines or existing ROWs or are adjacent to them. Perhaps pointing out to readers that many of the segments in the conceptual plan are not all that conceptual would be useful.
7. The evaluation of each line segment by an expert panel must have identified one or more data items which principally influenced their choice of level of

- environmental concern. Listing these critical factors for each line segment would provide valuable information. Unfortunately, if these critical factor(s) were not noted when the choice was made, they very likely cannot be recovered now.
8. Description of Criterion D: The description of “EnvFactor” does not state clearly its presumed relation to the level of environmental concern assigned by an expert panel. The values associated with different levels of “EnvFactor” are not given.
 9. Displaying the values assigned to ROW_Val and CharVal as bullet points would be much clearer.
 10. The report could potentially include discussions of the environmental scores at several different levels: individual segments (of dubious value), subsets of line segments constituting a path (defined above, possibly useful), and the transmission group level. Only the composite environmental scores of transmission groups are discussed.
 11. The report contains almost no interpretation of the highly aggregated transmission group scores, and the significances and the appropriate interpretations of the transmission group scores are not evident.
 12. Spreadsheet(s) displaying the variables from which the revised CREZ environmental scores were computed, analogous to the spreadsheets in the Phase 1B report, should be included in the Supplementing Materials.
 13. The combined CREZ Energy factor must be thoroughly defined in the report.
 14. Comparisons of the energy, cost, and the various scores of transmission groups to the median values of these measures or to scores of other groups should always be stated in terms of the quantities the scores represent (example - “higher than median cost”), not in terms of the scores themselves (“example - lower score”). I am not sure that these comparisons are always stated in the preferable terms.
 15. The pair of “Existing Transmission Line System and Draft RETI Projects” maps prepared by the CEC is an exceedingly useful addition to the information about RETI. A corresponding pair of maps showing only the RETI Projects, and indicating their voltages, their ROW categories, and their construction categories might also provide enough useful information to justify their preparation.
 16. Appendix A: Many of the descriptions of the “material” are so brief that they are far too obscure. More complete descriptions would be a significant help to readers.
 17. If a sheet collects results from other sheets, as the Seg Summary sheet does, the sheets from which results are collected should be listed.
 18. Transmission plans are the perfect example of a subject where pictures are worth many, many words. You can’t have too many maps.
 - 19.

Name:

Commenter:

Length:

Attachments:

Name:
Committer:
Length:
Attachments:

DRAFT