



The "Perfect Storm" for Renewable Energy

Implications for Wildlife and Habitat

Defenders of Wildlife



A Diversified Portfolio Is the Key!

- The environmental community prefers a diversified portfolio, including, energy efficiency measures, distributed generation, and appropriately sited utility-scale facilities.
- Diversifying makes sense economically.
- Diversifying helps protect our desert ecosystems.



Treading Lightly On The Desert

- Utility-scale facilities should be sited responsibly.
- Environmental groups have developed criteria for siting:
 - Mechanically disturbed private lands
 - Brownfields
 - Public lands with low resource value located adjacent to private degraded lands
 - Locations that could be served by existing substations, transmission lines and load centers
 - Locations that minimize the need to build new roads



It's the Biology, Stupid!

- **CEC mandates for protection of biological resources:**
- CEQA regulatory program
- Warren-Alquist Act
- California Endangered Species Act
- **BLM mandates for protection of biological resources:**
- NEPA
- Federal Land Policy and Management Act
- Endangered Species Act



White margined beardtongue, *Penstemon albomarginatus*
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Sierra Club Exhibit #1006

Examples of Affected Species

- Migratory birds – Golden eagle, burrowing owl.
- Reptiles – desert tortoise, flat-tailed horned lizard, Mojave fringe-toed lizard.
- Rare plants – White-margined beard tongue, Mojave milkweed, Rusby's desert mallow.
- Mammals – American badger, Nelson's bighorn sheep, desert kit fox, giant kangaroo rat.



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Ridgecrest Solar Power Project

- Solar parabolic trough facility proposed on 3,920 acres of BLM land near Ridgecrest, CA.
- CEC staff recommendation in the SA/DEIS was denial because the biological impacts could not be mitigated. The project is delayed 2 years to accommodate a study on impacts to Mojave ground squirrel habitat and movement corridors.

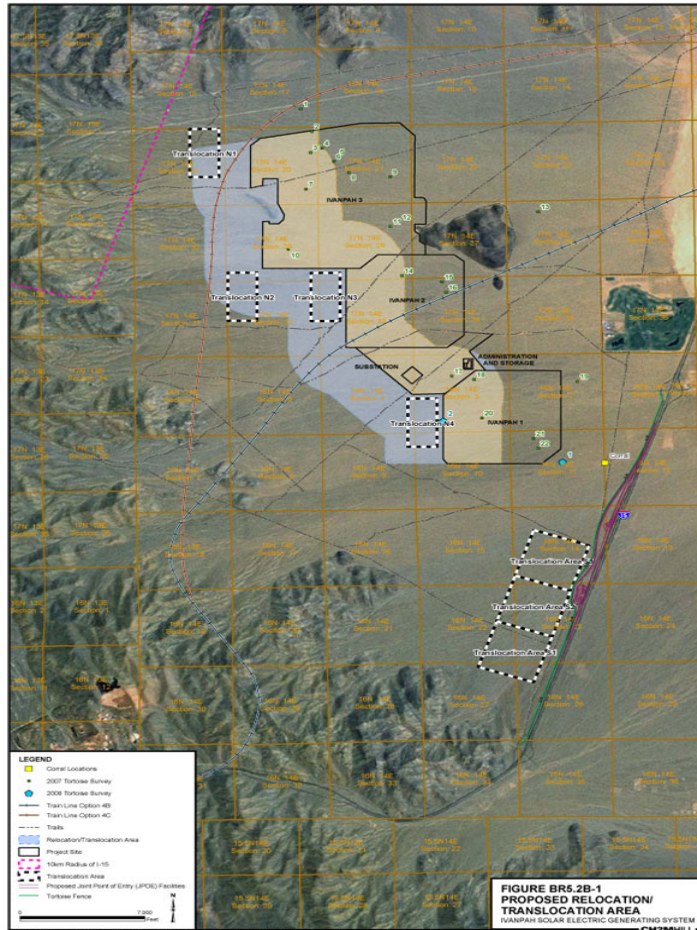


Calico Solar Project

- Stirling dish engine facility originally proposed on 8,200 acres of BLM land.
- Cut back to 6,200 acres in response to concerns from federal wildlife agencies about desert tortoise habitat in the northern portion.
- Cut back to 4,600 acres after the CEC committee requested a reconfiguration to further protect desert tortoise and bighorn sheep.



Desert Tortoise Translocation



- All desert tortoises must be translocated from the site in Spring or Fall.
- Desert tortoise translocations are risky: disease, predation, and lack of forage.
- Ft. Irwin translocation – 252 of 600 tortoises translocated in 2008 died. Additional translocation of 1,000 tortoises on hold.

Keeping Fast-Track Projects On-Track

- Degraded and disturbed sites on private land near existing transmission are optimal.
- Bigger may not be better.
- Alternatives, alternatives, and more alternatives.
- Thorough biological surveys are key.
- If a translocation plan is necessary, it should be carefully developed.

