Thank you for your comment, Esther Rubin.

The comment tracking number that has been assigned to your comment is SolarS50597.

Comment Date: July 15, 2008 17:11:43PM Solar Energy Development PEIS Comment ID: SolarS50597

First Name: Esther Middle Initial: S Last Name: Rubin Organization: Conservation Biology Institute Address: PO Box 369 Address 2: Address 3: City: Borrego Springs State: CA Zip: 92004 Country: USA Email: Privacy Preference: Don't withhold name or address from public record Attachment: Scoping period comments_080715.pdf

Comment Submitted:

See Attachment.



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BLM Solar Energy Development Draft Programmatic EIS Comments 9700 South Cass Avenue - EVS/900 Argonne IL 60439

July 15, 2008

Dear preparers of the Solar Energy Development Draft PEIS,

I am writing to submit the following comments as part of the scoping period for the Solar Energy Development PEIS.

I am in support of renewable energy sources such as solar, to move our nation away from our dependence on fossil fuels and to reduce the impacts of climate change. However, before the natural lands of our southwestern deserts are impacted by solar production facilities, we must *first* explore, develop, and exhaust all opportunities for the following:

- Conservation of energy. Obviously, the less energy we use, the less we must generate, and increased incentives for energy conservation would increase this effort.
- Rooftop solar production. Solar panels on residential, commercial, and public buildings in urban areas offer the ideal form of solar power generation because it generates power where it is needed. Construction of additional powerlines is avoided.

If all rooftop options are exhausted and it is determined that additional solar facilities must be built, then degraded areas should be considered as the preferred option.

Only after all of the above are thoroughly and honestly pursued to their fullest potential should natural areas in our deserts be considered for developed (and only if a careful evaluation deems it necessary to develop additional areas). In the PEIS, I strongly urge you to include an alternative that relies on conservation and rooftop solar initiatives, and avoids development of natural lands.

If natural lands in our western states must be developed for solar production, I strongly urge you to carefully consider the potential impacts on natural environments. This should include short-term as well as long-term impacts, as well as cumulative impacts. According to the PEIS website, lands within the California Desert Conservation Area (CDCA) may be open for development for solar

energy production, in accordance with the provisions of the CDCA Plan 1980 (as amended), and will not include lands ".....that have other special designations, such as National Monuments, Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Historic and Scenic Trails, Areas of Critical Environmental Concern, or other special management areas that are inappropriate for or inconsistent with extensive, surface-disturbing uses". I agree that these areas should be protected, but simply avoiding these areas may not provide adequate protection to sensitive natural resources in our deserts. Sensitive natural communities and habitats, all representing unique and irreplaceable sources of biodiversity and supporting a multitude of native species, are often found outside of these areas and may include:

- <u>Ephemeral playas (or dry lakes)</u>: home to unique communities of rare aquatic invertebrates and plants found only in this habitat type.
- <u>Sand dunes</u>: home to numerous plants and animals specially adapted to living in this unique environment.
- <u>Mesquite bosques</u>: home to numerous bird species, round-tailed ground squirrels, and numerous reptile species.
- <u>Pupfish ponds</u>: rare and unique aquatic habitats supporting endangered desert pupfish and other aquatic animals and plants.
- <u>Alluvial fans</u>: lands that may provide important habitat for species such as desert bighorn sheep and flat-tailed horned lizards.
- <u>Desert dry wash woodlands</u>: important habitat for desert tortoises, foraging areas for desert bighorn sheep, and home to a myriad of other sensitive plants and animals.

The list goes on, and my point is that these areas are sensitive, rare, and deserve careful management and protection even if they happen to fall outside of previously designated land categories (e.g., wilderness, ACECs, etc). I hope that you will <u>not</u> rely solely on existing protective status of various land categories in your evaluations.

In development of the PEIS, I also urge you to consider the potential impacts to landscape connectivity and ecological processes. Landscape connectivity is recognized as a crucial element of ecosystem health. The ability to move across the landscape is essential to wildlife survival, whether it is the day-to-day movements of individuals seeking food, shelter, or mates, dispersal of offspring (including dispersal of plants in the form of seeds or pollen), or seasonal migrations. In addition, landscape connectivity allows plants, animals, and entire habitats the option of long-term geographical shifts, which may be critical in the face of future climate change. It is therefore important that potential impacts to landscape connectivity (i.e., fragmentation) be carefully evaluated, and that these assessments consider connectivity between existing protected wildlands, connectivity within habitat types, and connectivity along elevational gradients. In the southwest deserts, for example, wildlife researchers and managers have stressed the importance of habitat connectivity between mountain ranges for persistence of bighorn sheep populations (e.g., Bleich et al. 2006, Epps et al. 2005). Analyses such as those conducted by the South Coast Wildlands (http://www.scwildlands.org/) for lands to the west of our deserts have identified key linkages that must be maintained to preserve the integrity and health of an entire network of wildlands, and similar evaluations could help guide appropriate placement of solar facilities in areas included in this PEIS.

Inappropriate locations of solar power facilities can also have impacts on ecological processes, such as water flow patterns and eolian processes (e.g., related to sand deposition at sand dunes), and I hope that you will also include evaluation of impacts to these processes in the PEIS.

Finally, I urge you to also consider the impact of powerlines and transportation corridors necessary for transporting power from solar production facilities. Given that the Sunrise Powerlink threatens State designated wilderness, I worry that future transport of energy may threaten not only lands with existing protective status (e.g., wilderness) but also natural resources outside of these areas.

Thank you in advance for the opportunity to provide these comments as part of the scoping period, and I will look forward to reading the draft PEIS next spring.

Sincerely,

Esther S. Rubin

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