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10 September 2009

B.L.M. Solar Energy Development  
Draft Programmatic EIS Comments  
9700 South Cass Avenue EVS/900  
Argonne, IL 60439

Dear Sir or Madam,

Our group is comprised of residents representing the Lakes and Valleys Communities of Leona Valley, Green Valley, Lake Hughes, Lake Elizabeth, Acton, and Three Points. Insofar as renewable energy concerns us, we question the effects of high voltage transmission lines traversing our area. The focus of our attention rests in the violation of viewshed; violation of local landscapes, including farms; sensitive forests and deserts; flyways, riparian and other bird and animal habitats; violation of private property rights that eminent domain makes available; and violation of a sense of safety due to the nature of electricity production and transmission that make fire a danger to public health, and suppression all but impossible. We are not opposed to renewable energy projects, but question the far-reaching and permanent effects of such an ambitious national program to support utility-scale solar development on public land.

We have several concerns regarding applications to your agency, for use of public land, numbering more than one hundred-fifty, that will require approximately one million acres. Renewable electricity generation on a scale of this magnitude will obviously have multitudinous and irreparable adverse effects on delicate desert environments, as well as residents who reside within proximity and directly adjacent to proposed projects, and who also face loss of property values and potential loss of livelihood and revenue from tourism when desert vistas and mountain views are filled with reflective solar facilities and transmission lines. Aside from the destruction of desert habitats and effects on landowners, our national security could be threatened. The possibility of major service disruption from terrorist attack, fire, earthquake, and other natural events is increased as a result of placing major power line corridors, miles wide, through vast expanses of open land. Also, many residents, who own property distant to projects, will find themselves adversely affected when these large, multiple route transmission lines are built through their rural communities, on their land, in order to transport electricity to large population centers.

Listed below are our concerns regarding effects of development on desert environments, wildlife, water quality and supply, air quality, transmission lines, effects of solar facilities on local and distant populations, and discussion of mitigation.

### HABITAT

- If, in fact, the Bureau of Land Management allows utility-scale solar facilities on hundreds of thousands of acres of public land, it is akin to scraping clean and fencing hundreds of thousands of acres of desert habitats that can never be restored, much like primeval forest once cut can never be "primeval" again.
- Fencing of solar facilities, building roads and transmission lines will transect enormous portions of habitat, and impede movement of wildlife who travel through "wildlife corridors" that, according to the Western Governors Association, have never been adequately mapped. There is concern that this transection will further isolate interconnected habitats, and create "islands" of parkland and protected areas that will reduce biodiversity.
- Clearing of desert vegetation can invite invasive species that can escape developed areas and spread and further disturb sensitive desert species.
- Human presence also brings with it the possibility of introducing domestic animal species and attendant human-adapted species, such as ravens, that prey on or displace native wildlife.
- There is real possibility for toxic substances, such as herbicides, pesticides, rodenticides, cleaning agents, dust control agents, and other hazardous materials to affect areas, people, and wildlife beyond facility boundaries, as well as water and air quality.
- There should be no allowance of incidental take permits for state or federal threatened or endangered species.
- How does noise affect wildlife? Sound produced by construction, operational, and maintenance activities, and buzzing of power lines could disturb people and animals.
- Detailed and frequent monitoring of facilities' operations that have potential to pollute habitats, air, and water should be required and the cost borne by the utility owners.
- Will hundreds of thousands of acres of solar panels or parabolic troughs increase desert temperatures and contribute to global warming?
- Consider the cumulative impacts of solar, wind, and transmission line projects; mining claims; oil leases, and military base expansions.

### WATER

- Desert wildlife is dependent on surface water, springs, seeps, creeks, wetlands, and seasonal streams. Little, if any, rainfall percolates downward to reach the water table. Pumping on utility scale or by cumulative numbers of smaller operations will cause groundwater depletion and loss of surface water that would be devastating to fish, plants, riparian communities, birds reptiles, mammals, and microscopic organisms living in the desert soil, causing collapse to ecosystems that depend on these resources.

- Depletion of surface water will contribute to wind erosion and air quality problems, placing more particulate matter into the air.
- There should be no allowance or compromise for downstream or groundwater or surface water pollution. Also, cumulative effects of surface and groundwater pollution from mining, ranching, oil pumping, off road use, and other activities allowed by the BLM should be factored into the PEIS.
- Prolonged drought and drought caused or compounded by climate change should be addressed when considering water sources for solar facilities on public lands.
- Public water rights associated with Federal Lands need to be preserved.
- The B.L.M. must ensure that water sources on public lands are not degraded. They must not be fenced or otherwise blocked from use by indigenous wildlife. Additionally, any proposed solar facility that will cause adverse changes to groundwater and surface water that affects private property owners' water availability should not be approved.
- Restrict placement of solar facilities to areas directly adjacent to sources of water that are transported from outside the area via aqueduct or pipeline, so no groundwater pumping need occur, or require water to be hauled via truck tanker. (This can offset the benefit of renewable energy, when truck trips are factored in.)

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### TRANSMISSION LINES

- First of all, transmission lines besmirch vast desert vistas, suburban and rural landscapes, and mountain views, all of which are "endangered" in Southern California. These diverse landscapes are part of our cultural heritage. Visions of open spaces of the West do not include 500KV transmission lines, or any other large transmission lines, or energy related structures. There is cultural value to the viewshed. Views need to be protected.
- There are several risks to transporting energy across deserts and mountains of Southern California, one of which is placing lines across the San Andreas Rift Zone, and other fault zone areas. The PEIS should consider earthquake risk in placement of facilities and transmission corridors; power lines downed by earthquake also pose extreme fire hazard.
- Additional fire hazard is expected during Santa Ana wind events, and it is noted that line faults occur more frequently during high winds and cause larger fires than those ignited by other sources. At least three of the hugely devastating fires in San Diego County in October, 2007 were caused by downed transmission lines. Transmission towers and lines on public lands must be required to allow for wind loading that will withstand the strongest of the Santa Ana windstorms.
- Transmission line tower structures should be engineered and tested to withstand the strongest of historical wind events.
- Transmission lines should not cross land that possesses multiple risk factors, i.e., major earthquake faults, forested hillsides and mountains that have high fire, wind, and flood risks.
- Fire suppression is dangerous, difficult, and nearly impossible in areas of downed power lines, increasing the risk of loss to desert habitats that may never recover; loss of infrastructure; and loss of private property. Frequently, cost of loss is transferred to property owners, ratepayers, or taxpayers for fire suppression, and increased insurance premiums create additional burdens. BLM should calculate fire suppression costs into lease or right-of-way permits.

- Terrorist plots to disrupt major power sources and transmission seem more likely in remote areas, especially if major trans-state corridors are established.
- Placing facilities closer to end-users would eliminate the need for expanding major transmission corridors and reduce the probability of major service disruption.

#### AIR QUALITY

- Studies indicate that the desert is valuable as a carbon sink. Will the large-scale removal of vegetation required for solar plants seriously reduce this value? Evaluation of the cost/benefit of this loss should be weighed against the value of the so called renewable energy produced. Assure that loss of a project's carbon dioxide sink's capability will be completely offset and produce a clear net carbon dioxide reduction benefit. Monitor, and review in an ongoing way, a solar plant's carbon footprint.
- Nearly all of the areas included in the West Mojave Plan have recorded concentrations of pollutants in excess of national and state ambient air quality standards for PM<sub>10</sub> and a variety of others. In addition, the presence of numerous new dirt roads will invite vehicle trespass that would compound the problem of particulates in the air. Construction and maintenance activities will cause serious air quality issues for wildlife and human inhabitants of the desert. Vast amounts of water will be required to subdue dust.
- Consider all impacts of air pollution, including drift from other areas as total to that area, regardless of the source, when evaluating solar projects. Do not allow subtraction of transported ozone in determining attainment and non-attainment areas.
- Refuse multi-source projects that use a small portion of solar energy production to facilitate approval and then use natural gas or some other greenhouse gas producing fuel to make electricity. Solar plants should be one hundred percent solar-only, and should only be considered for facilitated permit processes.

#### PRIVATE PROPERTY RIGHTS

- It is well established that property values are reduced when solar or wind energy projects are built near farms and rural communities. Consider the costs to communities' private land owners; land value they may never recover. Many may lose their livelihoods, especially if private recreational areas adjacent to BLM are overshadowed by thousands of acres of solar panels and transmission lines.
- Guarantee incorruptible, unbiased appraisal of private land, if no other alternative exists to avoid incursion of facilities or transmission lines onto private land.
- Eminent domain is forced upon property owners; construction of power lines bisect property, creating loss of privacy, roads, noise, soil erosion, discharge of pollutants, disturbing and harassing wildlife.
- Consider the effects of mass construction on local areas' infrastructure, i.e., roads, schools, housing, health care, firefighting and law enforcement personnel. Certainly, there may be short term benefits to local businesses, but "boom and bust" cycles leave behind ghost towns.

### MITIGATION

- How is it possible to mitigate, via land swap, one million acres? There is not enough habitat to consider even a 1:1 trade. Please do not consider only monetary benefit to the B.L.M. and utility scale corporations when determining a project's viability. It is desirable that trade in kind would have first priority in areas that are impacted, even those distant to projects because of transmission issues, rather than monetary compensation for habitat loss. Too often trades are made that do nothing to assuage the impact on local areas and residents that bear the brunt of projects for the "greater public good." Mitigation, whether land swap or monetary compensation, should remain local.
- Use already degraded land--abandoned mining claims, closed military bases, former nuclear test sites, saline infiltrated agricultural acreage, oil fields, areas close to water-providing infrastructure, or areas under already existing large transmission corridors for siting solar projects. Encourage policy that would make energy production local--to reduce the need to scrape and fence off deserts and place long transmission lines across our western landscapes. There would be no need to allow utility scale projects on public lands if the solar potential of rooftops, parking lots, city buildings, and industrial areas near end-users were fully utilized.
- Limit projects to areas listed above and require projects to meet cost/benefit criteria.
- Require fair and independent appraisal of private property directly affected by projects approved by the B.L.M. If a property owner protests the price for property taken, require a fair process or forum for resolving dispute that will assign the burden of protest on the project applicant.
- Continue open public forums for each project, throughout the entire permitting process. Do not allow fencing around solar projects, or water sources.
- Prioritize an "environmentally superior" project option or mitigation.
- Terminate Rights Of Way, and immediately suspend operation for projects that fail to properly monitor and limit pollutants, violate wildlife activities, and otherwise fail to adhere to project plans and requirements.
- Require bonding for each solar facility, with each bearing its own cost, in order that the project areas may be restored when age or other circumstances require decommissioning, at no immediate cost to the public.

In conclusion, we respectfully request that the Bureau of Land Management heed our concerns. Our own experience reveals that a major power producer, using eminent domain in our community to build transmission lines, has ignored people's vehement protest and run roughshod over property rights of our residents. They have improperly assessed land values, harassed wildlife, ignored procedures designed to protect wildlife, and improperly built roads on private and public land in violation of a legal ruling. Unfortunately, we do not expect utility companies using B.L.M. land to behave differently. Please ensure that project requirements are met throughout the building stage and beyond.

Other public and private utilities seek additional corridors through our mountain and valley communities, even before the B.L.M. considers approving numerous solar energy plants. Placement of transmission corridors through our mountain and desert areas ruins western vistas, reduces property values, increases fire risk, hampers fire suppression, and destroys habitat.

Responsible energy development favors policy that places sources of energy production closest to end-users. This would reduce the need for huge utility scale projects and thousands of miles of transmission lines that have the capacity to change or destroy sensitive desert and mountain habitats forever. Property rights would be maintained, viewshed would be maintained, as would the safety and security of animals and humans, without tremendous environmental cost. How can using a million acres of desert land be considered "green?"

Sincerely,

A handwritten signature in cursive script that reads "Susan Zahnter". The signature is written in black ink and is positioned above the typed name.

Susan Zahnter  
Community Liason  
Responsible Energy Development