

Thank you for your comment, Jim Harvey.

The comment tracking number that has been assigned to your comment is SolarS50485.

Comment Date: July 15, 2008 09:56:12AM
Solar Energy Development PEIS
Comment ID: SolarS50485

First Name: Jim
Middle Initial:
Last Name: Harvey
Organization: Alliance for Responsible Energy Policy
Address: P.O. Box 396
Address 2:
Address 3:
City: Joshua Tree
State: CA
Zip: 92252
Country: USA
Email:
Privacy Preference: Don't withhold name or address from public record
Attachment: BLM_Solar_PEIS_comments.pdf

Comment Submitted:

Please accept the attached pdf file as written comments submitted by the Alliance for Responsible Energy Policy for the Solar PEIS. The map on page 2 has also been included in full size format on a separate page at the very end of the pdf document, for improved readability and distribution.

Thank you

Jim Harvey
Alliance for Responsible Energy Policy [See Attachment.](#)



Alliance for Responsible Energy Policy (AREP)

Comments on the BLM’s Solar PEIS

AREP’s Comments on the Solar PEIS’ Stated Intentions

The Alliance for Responsible Energy Policy (AREP) would like to take this opportunity to thank the BLM for the transparent process the agency has established. Additionally, we are most appreciative that BLM listened when others and we expressed the need for BLM to conduct a comprehensive and cumulative analysis of the socioeconomic and environmental impacts of all the applicants for concentrated solar and wind farm projects. AREP also appreciated BLM’s wise decision to defer new applications until your comprehensive assessment was completed. However, we were dismayed by BLM’s abrupt and questionable decision to lift the moratorium even before the hearings were completed.

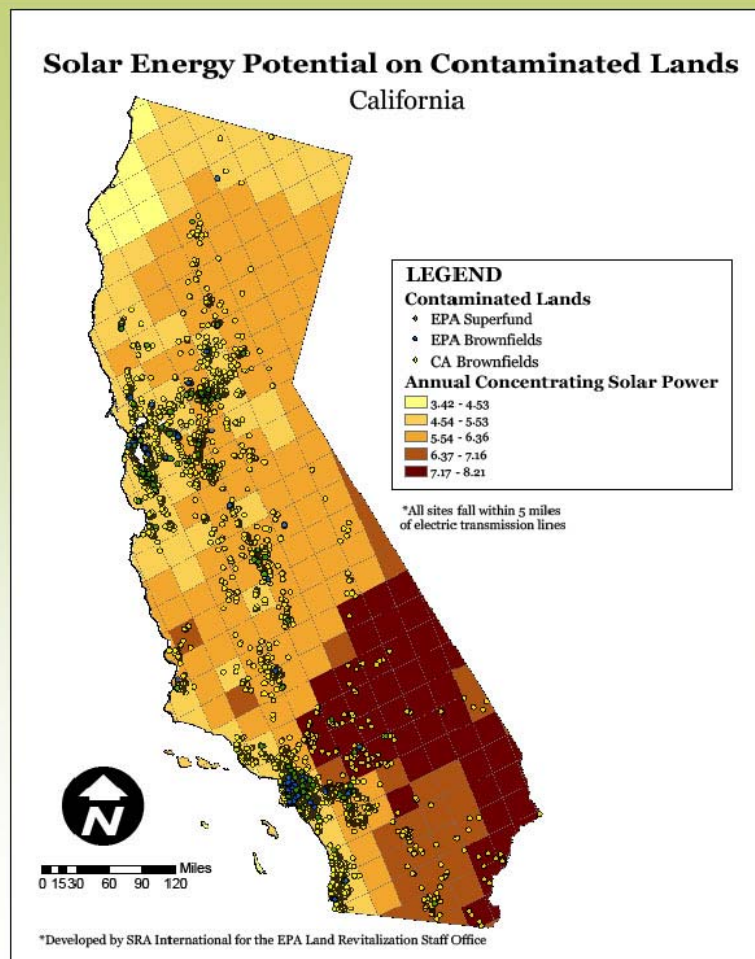
AREP is seriously concerned that BLM’s evaluation of alternative management strategies will fail to give just and due consideration to the outstanding potential that distributed energy and demand side management can have upon the need for remote concentrated solar projects that necessitate new and dangerous transmission lines.

AREP remains deeply concerned about BLM’s stated agenda to expedite environmental analysis for site-specific projects in the future and to quickly deploy solar energy projects. The concerned citizens of AREP, and the many others you will hear from, are not impeding responsible progress as some have suggested. Instead we seek to educate and implore the BLM and DOE to consider what current policy seeks to expedite is 1970’s big solar & 19th century transmission technology. Simply stated these archaic technologies do not constitute progress or responsible energy policy.

AREP's Comments on Issues BLM Must Address in the PEIS

1. BLM must employ desert experts with appropriate credentials and long standing familiarity within the territories of the 1,000,000 acres affected by the 125 proposed concentrated solar projects. The people of Arizona, California, Colorado, Nevada, New Mexico, and Utah entrust BLM's land use policies to protect our lives and livelihoods along with the plant and animal life that abound within the fragile habitats of our wilderness territories. Special consideration must be given to ensuring the protection of threatened and endangered wildlife, cultural sites, protected lands and the hard earned legislation that ensures their perpetuity for all the generations who follow our current policy makers.
2. NEPA requires the BLM's cumulative analysis to consider all viable alternatives before destroying undisturbed pristine lands. Consequently, if Brownfield and Superfund sites are not fully considered the BLM will expose itself to litigation for violating this NEPA requirement.

One of more than 20 states with RPS, California can meet its renewable energy goals by reusing Superfund and Brownfield Properties.



3. BLM must employ water experts with the appropriate credentials to evaluate the affect on water resources, as many concentrated solar plants require more than 30 million gallons of water each year to operate. This is especially true in California where two straight years of below average rainfall and very low snowmelt runoff have resulted in the largest court-ordered water transfer restrictions in state's history. Governor Schwarzenegger recently proclaimed a statewide drought and issued an Executive Order for immediate action to address this dire situation. Numerous California communities are already being forced to mandate water conservation or rationing. It is important to note water shortages also exacerbate existing and extreme fire danger due to dry conditions. Additionally, water shortages cause economic hardships in rural communities where crop losses affect food prices, unemployment rates and business failures. Urban communities do not have immunity from the socioeconomic problems that cascade from water shortages. The water experts will also need to carefully consider the potential of degrading water quality below safe levels in all affected territories.
4. BLM must employ expert engineers with the appropriate credentials to evaluate solar company claims that exhaust steam from thermal power plants can be ambient air-cooled. Evidence suggests that input steam heated by the sun produces relatively modest temperatures by power generation standards. Thus, these generation systems become particularly sensitive to changes in the output heat levels. On hot desert summer days the ambient air temperature can cause total power output to drop by up to 20%. Keeping the output temperature cooler than the surrounding hot desert summer air requires cool water; in fact, huge amounts of it. Unfortunately, the desert is especially limited in water resources, meaning that air cooled exhaust steam is a major constraining factor upon the performance of solar thermal plants.
5. BLM must employ expert engineers with the appropriate credentials to evaluate the concentrated solar plants that will use natural gas to produce energy to offset their inefficient and nonproductive solar periods. The public has little awareness of the hybrid nature of some concentrated solar designs. Regulatory agencies have suggested imposing limits (at or around 25%) on the burning of natural gas to produce power from concentrated solar plants. BLM's cumulative assessment must include the environmental affect from the green house gas emissions due to burning natural gas and the associated emissions from all the construction activity required to build and maintain the necessary gas pipelines. An important factor BLM must consider is how the RPS credits will be calculated for these hybrid plants. AREP trusts

BLM will not allow the people of the United States to be fooled into believing that all energy generated from hybrid solar plants is renewable! BLM's cumulative assessment must be transparent at every level regarding the burning of natural gas by solar plants and BLM must recommend a fool proof system for monitoring and regulating this use of nonrenewable energy.

6. BLM must employ soil and reclamation experts with appropriate credentials and long standing familiarity within the terra and flora ecosystems in the territories of the 1,000,000 acres affected by the 125 proposed projects. When large swaths of land, such as the 3,700 acres proposed by Bright Source's Ivanpah project, are clear scraped in arid regions noted for high winds the affect of blowing dust must be assessed. Desert dwellers are quite familiar with sand storms and a phenomenon known as "Dirt Devils." Plant operators also appear concerned about blowing dust. However their concern seems limited to dirty mirrors requiring more washing and difficult employee work conditions. The plant operators' solution is to cover the ground with chemicals that hold down dust. BLM's cumulative analysis must take these practices into consideration when assessing the impact upon 1,000,000 acres of clear scraped land. Concentrated solar plants have a life expectancy; some say 25 others 40 years. BLM's cumulative analysis must evaluate the impact on terra-flora reclamation in the affected territories. Fragile ecosystems such as desert habitats will take many decades and in some cases a century to recover from devastation caused by clear scraping and chemical applications. BLM's cumulative analysis must also consider the greenhouse gas emissions and landfill waste that will be associated with dismantling retired plants.
7. BLM must employ expert engineers and environmental scientists with the appropriate credentials to evaluate the amount of green house gases emitted into the environment from the manufacture of mirrors, steel, copper, magnets, etc. and fossil fuel burning associated with the production and transporting of materials necessary to construct 125 concentrated solar plants. The amount of green house gasses that will be emitted from the production and transporting of these materials must be made public and factored to offset the RPS credits that will be claimed by each plant.
8. BLM must employ environmental scientists with appropriate credentials to evaluate the overall affect on the desert environment and the planet from clear scraping 1,000,000 acres of territories in Arizona, California, Colorado, Nevada, New Mexico, and Utah. The citizens of our

Nation and peoples of our planet deserve an honest and objective appraisal of how our well-being will be affected by altering these fragile ecosystems.

9. BLM's PEIS must also consider the socioeconomic and environmental affects from the new transmission lines that will be necessary to carry the power from the 125 proposed solar plants in Arizona, California, Colorado, Nevada, New Mexico, and Utah. AREP remains seriously concerned that consideration and calculation of transmission affects will be left out of the BLM's cumulative analysis. Increased reliance on delivery of power from remote areas will be quite expensive. Estimates suggest the cost of 500kV power lines range from 1 to 1.5 billion dollars per 100 miles. Consequently, if a solar thermal plant requires 200 miles of new power lines, the cost of transmission infrastructure will rival the cost of the power plant. Consideration must also be given to the significant power losses over long distance lines, particularly during hot summer days when both heat and higher demand for electricity put extra strain on the transmission system. Generating companies often down play transmission power loss suggesting numbers like 1 to 3 percent. Independent engineers however suggest transmission loss can be as high as 20 percent. The justification for building new concentrated solar plants looks quite different from the "whole system" standpoint, when all costs, performance and environmental issues are considered together as they should in a truly cumulative analysis.

10. BLM must employ fire scientists and seismologists with appropriate credentials to evaluate the increased fire risk from constructing new power lines. In the past few years downed power lines have purportedly caused several wildfires in the western states. Lives have been lost, homes and other properties have been destroyed, families have been displaced and hundreds of thousands of acres of wilderness and other habitats have burned. Utility companies have been sued by resident groups in an attempt to recover their losses while insurance companies have tried to opt out of claims due to the utility companies' potential liability. BLM must include in its analysis that clearing native plants during construction results in huge increases of prolific non-native grasses that increase potential for fast burning and very hot fires. In considering fire risk in the cumulative analysis the BLM must estimate the potential losses from fires caused by downed power lines as well as the cost to state and local fire service agencies to fight wildfires. The citizens of Arizona, California, Colorado, Nevada, New Mexico, and Utah deserve an honest and objective appraisal of the risks and costs from increased fire potential.

11. BLM must employ appropriate scientists that can study the heat/light funnel affect caused by the mirrored/tower array that many concentrated solar plants will create. As noted in Seville, Spain the glare and heat create a blinding and scorchingly hot pyramid-shaped region between the mirrors and the tower. Surely this type of heat/light funnel will have negative impacts on all sorts of wildlife and aircraft. Indeed, it may operate like a giant bug zapper thousands of acres across and hundreds of feet high zapping and blinding everything nearby. BLM must study the impacts of this scale of light and heat transfer upon bats, birds, insects, pilots and passengers, etc.
12. AREP is cognizant that BLM's charge does not include developing energy policy for our Nation. However, BLM has partnered with DOE and is therefore in a proximate position to influence policy change and development. Consequently, AREP encourages BLM to modify its cumulative study to include a comparative analysis of the proposed 125 concentrated solar plants with the equivalent output of photovoltaic energy generated at point of use. BLM must consider all of the cost, damage and risk associated with the 125 proposed concentrated solar plants and the necessary transmission lines, such as: 1) Destruction to the desert ecosystem; 2) Depletion of water resources; 3) Viability of air cooling exhaust steam; 4) Fossil fuel burning at hybrid solar plants; 5) Soil and reclamation issues; 6) Green house gas emissions from production and transporting of materials; 7) Overall affect on the National and planetary ecosystems; 8) Cost and efficiency of transmission lines; 9) Increased fire risk, and; 10) Light/heat funnel effect. The comparative analysis suggested by AREP is very likely to prove that substituting urban/suburban photovoltaic energy generated at point of use for remote concentrated solar plants can and will meet Arizona, California, Colorado, Nevada, New Mexico, and Utah's energy needs while fully mitigating all the environmental impacts associated with remote solar energy production. AREP encourages BLM to keep in mind that Germany and Spain are currently installing 2000MW of photovoltaic energy per year.
13. AREP is confident that when BLM completes not only a cumulative but also a comparative analysis the agency will conclude that current energy policy is taking our Nation in the wrong direction. Current energy policy favors an archaic system of remote generation and long distance transmission. This approach is costly, dangerous and inefficient. Generating energy at the point of use or very near the point of use is less expensive, less dangerous and kinder to the surrounding environments and overall ecosystems. Currently, in our Nation growth in the

photovoltaic industry suffers from a lack of venture capital. Entrepreneurs need assurances that photovoltaic demand is strong enough to justify their investment. When energy policy favors locally generated energy systems photovoltaic demand will increase rapidly thus investment capital will follow. The competitive spirit of our marketplace will figure out ways to rapidly provide less expensive and more efficient photovoltaic systems to consumers. New local energy generating products will move from research and development laboratories to our homes and buildings at the rapid pace this Nation is capable of achieving. Delivery systems for locally generated energy that minimize or eliminate upfront costs for property owners will flourish in a responsible energy policy environment.

14. AREP also encourages BLM to consider the potential energy savings that our Nation could realize if our energy policy also favored demand side management. Venture capital and numerous products will follow, many already exist, that assist home and business owners and building engineers to reduce energy consumption without compromising life styles and business practices.

15. In closing, AREP once again wants to thank the BLM for initiating this cumulative study. We strongly encourage BLM to consider the suggestions and recommendations contained in AREP's comments. We trust BLM will want to play a key role in moving our Nation in the direction of Responsible Energy Policy.

Respectfully submitted,

The Alliance for Responsible Energy Policy

One of more than 20 states with RPS, California can meet its renewable energy goals by reusing Superfund and Brownfield Properties.

