The Great Basin Group of the Sierra Club is naturally interested in the scope of the Programmatic Environmental Impact Statement to be developed for BLM lands within the United States. This interest arises from the fact that Nevada, having roughly 67% of its territory under BLM management, will likely be disproportionally affected by the implementation of the PEIS. The Great Basin Group's area comprises the north and much of the central portions of Nevada, which have excellent solar generation potential, and so our concern is even more elevated. The membership of the Great Basin Group numbers over 2,500; and this comment letter speaks in behalf of those members.

The Sierra Club has long supported the development of renewable energy sources such as solar generation and will continue to do so. The Great Basin Group has yet to see a utilities-grade solar generation plant within its territory, but this will surely come within a few short years. Many Sierra Club individuals within our group have already made the step to solar energy with PV panels, solar thermal panels, and net metering installations.

We wish not to place overall impediments on the movement to solar energy generation plants across our state and the US in general. However, we wish to balance an aggressive solar development plan on the part of the US government with some protective mechanisms that arise from our long-standing conservation efforts to preserve the natural beauty and ecosystems of the US. Thus our comments will be in the nature of guiding the development wisely, not preventing it. The Sierra Club has vigorously opposed, for instance, mining projects, highway projects, water projects, and so forth when they clashed directly with our deep-seated conservation goals; and we feel that there are some situations where solar energy development will not be a compatible or desirable use of public land.

On those predications, we propose that the following items be given consideration in developing the PEIS.

- 1. There must be a look at the allowable locations of solar generation plants. We strongly feel that certain areas should be withdrawn from development consideration, much the same as for other types of projects which the BLM considers, such as mining, highways, etc. Withdrawal should be based on a well-designed matrix of pros and cons with regard to habitat, scenic beauty, pre-existing beneficial use, threatened or endangered species, riparian quality, density of similar projects in same area, etc. Beyond withdrawal itself, a matrix should exist to simply steer development away from certain areas to nearby less sensitive areas.
- 2. Proposed developments should be rated against a list of weighted criteria which are fairly concrete rather than abstract, such that developers are all treated to the same review criteria and such that interested parties (such as the Sierra Club) can judge whether the BLM has made a thoroughly objective decision in approving given permit applications.
- 3. All other things equal, the PEIS should address how footprint (i.e., area of project) versus total capacity will be judged. We strongly believe that technologies which create the same number of watts using less land area should generally be rated

higher. In fact, regulations arising from the PEIS should discourage technologies which don't use state-of-the-art technology to minimize the footprint on public land. This may require an actual quantitative criterion which should probably change with time as newer and more compact technologies become available. The reason we emphasize this is that, although solar energy generation is very desirable for many reasons, it does command larger tracts of land per watt than conventional fossil-fuel plants and other renewable sources.

- 4. The capacity of large solar projects to permanently change the character of a tract of land is not well known at this time. The PEIS must address this by requiring full studies of this effect within an already established site. The question is what impact will come from solar generation facilities which essentially cover square miles of land. Are we prepared to accept substantial and permanent loss of living organisms in, for instance, desert valley environments where fragile ecosystems exist? Probably unable to be definitive at this time with regard to ecosystem impact, the PEIS should be written such that there is intent to provide evidence on this question for future valuations which might conceivably be applied.
- 5. There are reasons for being concerned about the longevity of solar energy generation plants in the face of rapidly developing technology in this field. The PEIS should address how reclamation is to be handled when current state-of-the-art solar plants may become unviable due to newer technologies drastically undercutting the wholesale cost of generated electricity. Operators must not be allowed to walk away from square miles of equipment, leaving a blight which the public would pay to dispose of. Reasonable bonding must be required to cover situations where it may be desirable for an operator to simply shut down a facility. As an example, a company called Nanosolar has touted a radical new "printing" technology which could drastically reduce the installation cost per watt for large solar energy facilities.
- 6. The PEIS must address the utility line components which must connect solar generating plants to the main electrical grid. Solar generation sites which would require new, long extensions of the current electrical grid should be down-weighted in comparison to those proposed adjacent to or near to the current grid. This is because a new utility line may actually have more cumulative impact than the solar generation site itself. The traversal of a now pristine view-shed, say in the Black Rock NCA of northern Nevada as an example, with a utility line constructed to serve one new solar facility should be so unacceptable that the facility would not be eligible for a permit.

We believe that the above items are appropriate for the PEIS to consider. And we have one further comment to make. We are aware of the off-on situation with processing permits relating to proposed solar energy generation. The most recent news (7/2/2008) suggests that BLM will continue to process permits relating to solar through the PEIS period. We strongly suggest that the BLM should find creative ways to reassign manpower in such a manner that solar developers can be assured that the US government will not be imposing undue delays to well-designed projects put forth by environmentally conscious applicants. There should be some middle ground between a "land grab" the PEIS is supposed to solve and outright shutdown of the permitting process. We ask that soar permits be given as much or more priority than those for

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conventional, and far more environmentally damaging, energy projects such as gas production, oil drilling, and coal extraction.

David von Leggen

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