

Thank you for your comment, Jeff Gardner.

The comment tracking number that has been assigned to your comment is SolarM60225.

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Solar Energy Development PEIS  
Comment ID: SolarM60225

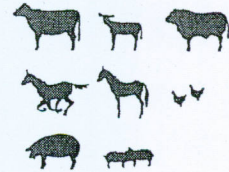
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Attachment: N-4 solar comments.pdf

Comment Submitted:



## N-4 State Grazing Board

P.O. Box 461, Panaca, Nevada 89042  
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September 1, 2009

Solar Energy PEIS  
Argonne National Laboratory  
9700 South Cass Avenue – EVS/900  
Argonne, Illinois 60439

***Re: Comments Regarding the Solar Programmatic Environmental Impact Study (Solar PEIS)***

To Whom It May Concern:

The N-4 State Grazing Board (Board) is a legal entity of Nevada State Government, organized under NRS Chapter 568 “Grazing and Ranging.” The Board represents grazing interests within the Bureau of Land Management’s Ely District including White Pine and Lincoln Counties, as well as portions of Eureka and Nye Counties. Development of utility-scale solar plants within the Solar Development Analysis Areas or specific Solar Energy Study Areas (Delamar Valley, Dry Lake Valley North and East Mormon Mountain) will result in serious impacts to the public lands grazing permittees that this Board represents. The Board has prepared the following comments per the National Environmental Policy Act.

Grazing of livestock on public lands is an essential part of the ranching industry within the analysis area. The ranching industry is an integral piece of the economic and traditional well-being of these rural communities. Public land grazing operations have been perfected over the years to protect and maximize available vegetative and water resources through careful management. The Delamar Valley, Dry Lake Valley North and East Mormon Mountain Study Areas are located within either the Mojave or Great Basin Ecosystems, which are both extremely fragile and vulnerable to disturbance. Development of utility-scale solar projects will convert the public lands within each project area from multiple use management to a sole-use that benefits a single commercial interest. As such, it is critical that all impacts be sufficiently identified early in the process and mitigation measures developed in order to avoid or minimize potential direct and indirect impacts to public lands grazing operations. Indigenous knowledge of the effected permittees and familiarity with their grazing operations is of paramount importance to this process.

It is the Board’s understanding, per the Department of Energy’s (DOE) presentation materials, that the Solar PEIS will:

- Be used to identify lands that are technically and environmentally appropriate for utility scale solar development



- Identify “generic” impacts of such actions and identify potential mitigation measures
- Establish policies and practices to implement such developments while minimizing impacts to public lands by tiering site-specific recommendations to the Solar PEIS

Given these major criteria for the Solar PEIS, the Board has arranged its comments and questions per each of these categories.

### **Identification of Lands Appropriate for Utility-Scale Solar Development:**

The Solar PEIS shows two analysis areas: “Solar Energy Study Areas” and “BLM Lands Being Analyzed for Solar Development in PEIS”. The Board requests clarification as to which areas this PEIS would apply to as the analysis area is much larger than the specific study areas.

The Board only supports those areas approved by the Lincoln County Commission for consideration of solar development at this time (See Attachment 1). This includes portions of the Dry Lake Valley North Study Area located within the Ely Springs Cattle grazing allotment and portions of the Delamar Valley Study are located within the Buckhorn allotment. At this time, the Board does NOT support solar development in any other grazing allotment.

Further, the Board will not support any solar development that does not include the input of the public lands grazing permittee from the beginning of the site-specific analysis in order to identify impacts and potential mitigation measures to ensure the long-term sustainability of that permittee’s operation. The Board believes that, once identified, the proponent of any specific project should notify all impacted permittees as well as BLM staff to solicit input in terms of potential impacts and mitigation actions. The proponent should be responsible for providing economic means for each affected permittee to retain a professional range consultant, if desired, to serve as the permittees representative. All mitigation actions should be monitored for success and adaptive management should be afforded to allow for the most effective implementation of mitigation actions. Furthermore, it should be the responsibility of the project proponent to ensure that impacted public land grazing operators remain economically viable as a result of appropriate mitigation actions developed cooperatively by the project proponent, BLM and permittee.

### **Impacts of Utility-Scale Solar Development and Potential Mitigation Measures:**

There are a suite of impacts relevant to the multiple use principles and rangeland grazing operations administered by the BLM on public lands for nearly every solar project that is implemented. The following impacts should be identified in the PEIS and required as part of the site-specific analysis for all projects:

**Loss of Animal Unit Months (AUMs):** An AUM is the amount of forage required to feed one mother cow and one calf, or five sheep, for one month. In terms of public lands grazing, the number of AUMs is the measure used to issue grazing permits. AUMs cannot be viewed as being proportional to the overall surface area of a given grazing allotment. In terms of solar development, areas of prime solar potential could overlap significantly with areas of key grazing forage as a result of gentle topography requirements located within valley bottoms. High value winter forage such as white sage (winterfat), bud sage and salt brushes as well as other native grasses and shrubs are also



located in many of these areas. Therefore, there is a high potential that the number of AUMs allotted to a grazing permittee could be significantly reduced as a result of solar development if proper mitigation is not completed, in advance of construction and operation of any solar facility.

The Board requests that the PEIS makes a commitment to no net loss of AUM's on grazing allotments where solar facilities are developed. In order to accomplish this goal, it is imperative to consult the BLM range conservationist and permittee for each allotment in order to cite facilities in low-value forage areas. It may also require development of new range improvements in order to maximize areas of low use within an allotment.

**Loss of Native Vegetation, Soils and Increased Risk of Noxious Weeds:** Any surface disturbance within either the Great Basin or Mojave Ecosystem will result in a loss of native vegetation, increase the risk of soil erosion (due to both wind and precipitation) and greatly increase the risk of establishment and spread of noxious weeds. These outcomes reduce overall rangeland health and resilience, which negatively impacts traditional land uses and multiple use values.

The Board requests that the PEIS requires certain stipulations for all projects. These stipulations should include:

- Minimizing the project disturbance area to the greatest extent, and a protocol to clearly delineate all project disturbance limits with highly visible temporary construction fencing
- Developing revegetation plans for each project area before the start of construction that are developed in conjunction with revegetation specialists who demonstrate indigenous experience to the geographic area and plant communities, and approved by the BLM before the start of construction. Each plan should include:
  - A topsoil salvage plan
  - Use of beneficial native and adapted plant species that will stabilize soils and compete with noxious weeds
  - Use of temporary irrigation to establish desired species
- A noxious / invasive weed management plan

**Impacts to Existing Range Improvements:** Range improvements are critical to grazing operations on public lands and include: seedings, fencing, gates, cattle guards, corrals, chutes, wells, reservoirs, pipelines, troughs, tanks, water hauls, roads, and trails. The BLM maintains an inventory of many range improvements, but the inventory is oftentimes incomplete. In order to maintain a viable ranching operation, all range improvements within the project site must be identified, GPS located, and mitigated if the project will hinder the operation of such improvements.

The Board requests that the PEIS include the identification of all range improvements within or adjacent to the project area as part of the impact analysis of each specific project area. This identification shall require the input of both the BLM AND permittee. Each impacted range improvement shall be mitigated based on input from the BLM AND permittee as part of the project at the proponent's expense. Further, the installation of new range improvements at the proponent's expense shall be viewed as an acceptable measure to mitigate the loss of use within the project area. Such improvements should be developed prior to land disturbing activities associated with the project and maintained at least until the project is decommissioned.



**Impacts to Water Resources and Water Rights:** Water is critical to any rangeland livestock operation. Many of the water resources (i.e. natural springs, catchments, or wells) have been developed and improved at the grazing permittee's expense and care in order to provide water throughout the allotments to better distribute livestock. These water sources benefit wildlife and wild horses in addition to livestock.

The Board requests that the PEIS include the identification of all water resources within or adjacent to project areas as part of the impact analysis of each specific project area. This identification process shall require the input of both the BLM AND permittee. Each impacted water resource or water right shall be mitigated based on input from the BLM, permittee and State Engineer at the proponent's expense. Further, the installation of new or improvement of existing water resources at the proponent's expense to enhance forage availability within impacted grazing allotments shall be viewed as an acceptable measure to mitigate the loss of use within the project area.

**Impacts to Base Property:** Each grazing allotment is required to have an associated privately owned base property that can sustain livestock in the event that the allotment cannot. Base property can be either water or land.

The Board requests that the PEIS include the identification of all base property associated with impacted grazing allotments as part of the impact analysis of each specific project area. Any impacted base property shall be mitigated at the proponent's expense based on input from the BLM AND permittee.

**Impacts to Public Lands Access:** The Board anticipated that access to or through solar project areas will be greatly limited. Open access to public lands is essential to maintaining multiple use principles and grazing allotments.

The Board requests that the PEIS include the identification of all public land access routes within or adjacent to project areas as part of the impact analysis of each specific project area. Any impacted access route shall be mitigated in order to ensure no net loss of access to adjacent public lands via mitigation at the proponent's expense.

**Policies and Practices to Minimize Impacts for Site-specific Development:**

According to DOE's presentation materials, the PEIS will develop policies and practices to minimize impacts for site-specific development of solar projects. The PEIS should make clear what process will be used to approve site-specific developments, and the means by which effected parties can provide input during that process. While the Board understands the desire for this process to be streamlined, it is essential that the input of effected parties be included in identifying impacts and required mitigation actions. A process allowing site-specific analyses must be included within the scope of the PEIS as general Best Management Practices are simply too vague to adequately address all site-specific impacts and mitigations under NEPA requirements.

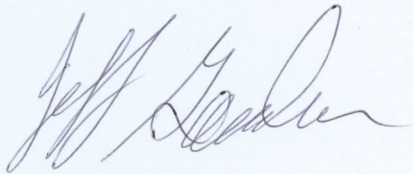


Solar Energy PEIS  
Argonne National Laboratory  
September 1, 2009  
Page 5

The impacts identified in the previous section are those that must be addressed for every site-specific project. Therefore, it is imperative that the PEIS include site-specific analyses informed by input of the affected grazing permittee and BLM range conservationist from the beginning of the projects to the end. The Board requests that it be included as a cooperating agency for the PEIS, and that the Board be notified and included in any site-specific projects within the Ely BLM District that will be conducted as a part of this program.

The Board hopes that the above listed comments will help to ensure solar project implementation that maintains the sustainability of grazing operations and the BLM's multiple use mandate on public lands. Please feel free to contact the Board's consultant, John L. McLain or Jeremy Drew with Resource Concepts, Inc. at 775-883-1600 with any questions regarding this letter.

Sincerely,



Jeff Gardner, Chairman  
N-4 State Grazing Board

Attachments: Lincoln County Regional Development Authority Recommended Solar Energy Citing and Solar Project Areas Approved by the Lincoln County Commission on March 2, 2009

cc:

- Governor Jim Gibbons*
- Nevada Legislative Committee on Public Lands*
- Senator Harry Reid*
- Senator John Ensign*
- Congressman Dean Heller*
- Congresswoman Dina Titus*
- Congresswoman Shelley Berkley*
- Bob Abbey, Director, Bureau of Land Management*
- Ron Wenker, State Director, Nevada BLM*
- Rosemary Thomas, District Manager, Ely BLM*
- Victoria Barr, Manager, Caliente BLM Field Office*
- Paul Mathews, Chairman, Lincoln County Commission*
- Carl Pyatt, Chairman, Lincoln County Regional Development Authority*
- Ron Cerri, Central Committee, Nevada State Grazing Boards*
- Meghan Brown, Nevada Cattlemen's Association*
- Jeff Fontaine, Nevada Association of Counties*
- Nevada Farm Bureau Federation*



*Attachment 1*

**Board of Lincoln County Commissioners Recommendation  
of Designation of Areas of Public Land for Solar Energy Development  
(3/2/09)**

Area	LCRDA Recommendation		Lincoln Co. Commission Recommendation <sup>2</sup>	
	Acres	MW Potential <sup>1</sup>	Acres	MW Potential <sup>1</sup>
A (Cave Valley)	0	0	0	0
B (Lake Valley)	7,680	1,536	0	0
C (W. Hamlin Valley)	0	0	0	0
D (E. Hamlin Valley)	0	0	0	0
E (Sand Springs V.)	3,840	768	0	0
F (Garden Valley)	0	0	0	0
G (Coal Valley)	6,400	1,280	0	0
H (Dry Lake Valley)	6,400	1,280	5,760	1,152
I (Groom Lake V.)	0	0	0	0
J (Tikaboo Valley)	0	0	0	0
K (N. Delamar Valley)	1,720	344	0	0
L (S. Delamar Valley)	0	0	5,760	1,152
Total	26,040	5,208	11,520	2,304

1/ Assumed to be 5 acres per MW

2/ Alternative 1 formulated following review of Lincoln County Regional Development Authority (LCRDA) recommendation by BLM; N-4 Grazing Board; Alamo Town Board; LDS and Lincoln County Public Land Advisory Group representatives.