Thank you for your comment, Tiffany Bartz.

The comment tracking number that has been assigned to your comment is SolarM60193.

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Comment Submitted:



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Solar Energy PEIS Argonne National Laboratory 9700 S. Cass Avenue EVS/900 Argonne, IL 60439

Greetings,

On behalf of the Southern Utah Wilderness Alliance ("SUWA"), please accept these scoping comments regarding the Bureau of Land Management's and the Department of Energy's ("the Agencies") three proposed Solar Energy Study Areas ("SESAs") in Utah.

SUWA is a non-profit organization based in Salt Lake City, Utah, with approximately 15,000 members, many of whom reside in Utah. SUWA's mission is to further the preservation of the outstanding wilderness-quality lands throughout Utah and to promote the management of these lands in their natural state for the benefit of all Americans. SUWA has a deep and longstanding interest in the protection and preservation of all of the Bureau of Land Management's ("BLM's") wilderness-quality lands in Utah, including lands identified by the Utah Wilderness Coalition ("UWC") as possessing wilderness characteristics and proposed for wilderness in America's Red Rock Wilderness Act ("ARRWA"). Because SUWA's mission is to preserve wild lands in Utah, SUWA will limit these comments to the three Solar Energy Study Areas that are proposed in Utah, and will not provide comments on the SESAs proposed in other states.

SUWA strongly supports increasing renewable energy, including solar power, throughout the western United States, but believes such development must be conducted in a responsible manner that preserves wilderness-quality lands and remote wild landscapes. SUWA appreciates the Agencies' efforts to expand solar energy via the Solar Programmatic Environmental Impact Statement ("Solar PEIS") and to identify problematic issues early in the National Environmental Policy Act ("NEPA") process.

SUWA appreciates that Utah BLM has already applied screening criteria, including Wilderness Study Areas, Areas of Critical Environmental Concern, as well as the BLM's 1999 wilderness inventory and the Utah Wilderness Coalition's wilderness proposal data to arrive at this first round of SESAs in Utah.

During this exciting time when our country is beginning the transition away from its reliance on fossil fuels, SUWA is eager to be part of the process of developing the

country's renewable energy resources and ensuring that such development occurs in a deliberate, responsible manner in locations appropriate for such large scale developments.

A. SUWA Supports Channeling Solar Development into Previously Disturbed Areas and Areas Near Existing Transmission Lines and Infrastructure.

SUWA supports channeling renewable energy development into previously disturbed areas and leaving undisturbed areas wild. Likewise, SUWA supports developing renewable resources near existing transmission lines and infrastructure. Channeling development into such areas will ensure that solar energy development in Utah will not unnecessarily contribute to soil disturbance, erosion, dust storms, water shortages, climate change effects, other potential adverse impacts to resources. SUWA commends the Agencies' choice of SESAs in Utah, particularly the Escalante Valley and Milford Flats South SESAs, that meet these criteria. The Escalante Valley and Milford Flats South SESAs already have a significant amount of development, including transmission lines and roads within and surrounding them.

There remain few areas on Utah's public lands where soils have not yet been disturbed. Keeping these places undisturbed is important for many reasons: it will help reduce soil erosion as drought and climate change effects continue; will help retain native vegetation and reduce the potential for non-native invasive species; will significantly benefit wildlife, including threatened, endangered, and sensitive species; will help protect water quality and quantity; will benefit air quality; will preserve cultural resources; will safeguard clear night skies and visual resources; and will protect other resources in the ecosystem.

New research shows the importance of limiting the generation of dust by ensuring that undisturbed soils remain undisturbed. This research illustrates that dust generated in Utah is carried by winds into Colorado, falls on the mountain snowpack, and accelerates the melting of the snowpack, causing serious consequences for river flow levels and the timing of snowmelt. *See, e.g.*, Neff, J.C., et al., *Increasing Eolian Dust Deposition in the Western United States Linked to Human Activity*, NATURE GEOSCIENCE, (Nature Publishing Group, 2008) (attached as Exhibit A); Eilperin, Juliet, *Dust Storms Escalate, Prompting Environmental Fears*, THE WASHINGTON POST, (Apr. 23, 2009) (attached as Exhibit B); *see also* Photos of Colorado snowpack with layers of dust from two separate March 2009 snowstorms (attached as Exhibit C). The dust on the snowpack absorbs more sunlight than does white snow, which is highly reflective, and contributes to certain effects that are already exacerbated by climate change, such as early spring runoff. *See* Exhibit B. It is therefore very important to ensure that solar energy development in Utah will minimize the amount of soil disturbance and not significantly increase the amount of dust generated.

Not only does Utah's dust contribute to premature snowpack melt in Colorado, it also contributes to serious local air quality concerns in Utah. Dust generated in the

southwestern part of the state, where the SESAs would be located, may travel on the prevailing winds northeast to the populous Salt Lake Valley and the Wasatch Front, raising the level of particulate matter and affecting the health of over two million residents. The spring and summer of 2009 saw several such dust storms. *See, e.g.*, Photos taken in July 2009 in southwestern Utah's Pine Valley, one valley west of the Wah Wah Valley (attached as Exhibit D). The best way to limit the creation of dust is to locate development in previously disturbed areas.

In addition to decreasing the amount of dust generated, reducing the extent of surface disturbance is important for wildlife, vegetation, water quality, erosion, visual resources, and many other resources. Preserving undisturbed soils or soils with biological soil crusts is crucial for combating the spread of invasive species and preventing erosion. Studies show that disturbed soils lead to the spread of invasive plant species, such as cheatgrass. *See, e.g.*, Reid, Chad R., Goodrich, Sherel, and Bowns, James E., *Cheatgrass and Red Brome: History and Biology of Two Invaders*, USDA Forest Service Proceedings (2008) (indicating that cheatgrass, perhaps the biggest threat to native plant communities in Utah, invades areas where the soil has been previously disturbed) (attached as Exhibit E). Undisturbed soils also help to prevent erosion by reducing the amount of runoff from heavy rain or snow events. *See, e.g.*, Belnap, Jayne, et al., *Biological Soil Crusts: Ecology and Management*, U.S. Department of Interior, Bureau of Land Management, Technical Reference 1730-2 (2001) (attached as Exhibit F).

B. SUWA Supports the Development of the Escalante Valley and Milford Flats South Solar Energy Study Areas.

SUWA supports the development of the Escalante Valley and the Milford Flats South proposed Solar Energy Study Areas. These two proposed SESAs are located near existing infrastructure, including existing high-capacity transmission lines (see Wild Utah project map attached as Exhibit G). Locating large-scale renewable energy facilities near existing infrastructure is important because it reduces the necessity for substantial new surface disturbance. Reducing the extent of surface disturbance is important for all the reasons discussed above, including limiting the amount of dust generated.

In addition, these two proposed SESAs will benefit the local economies of Beaver, Iron, and Millard counties and provide local jobs. The Milford Flats South SESA is near the town of Milford, which is currently experiencing a boost to its economy from the ongoing construction of the Milford Wind farm, located approximately 10 miles north of Milford, and consisting of nearly 100 wind turbines. Construction of a solar energy facility south of Milford will continue to help the local economy, including the towns of Milford and Minersville. Construction of the Escalante Valley SESA would similarly provide a boost to Beaver and Iron County's economy. In addition, Beaver County is home to two existing geothermal power plants, the Blundell plant and the Cover Fort-Sulphurdale plant, both located northeast of Milford. Construction of the

Milford Flats South and/or the Escalante Valley SESAs would make southwestern Utah home to all three types of renewable energy (wind, solar, and geothermal), and would continue to transform the area into one of the country's hot spots for renewable energy.

For all of these reasons, the Escalante Valley and the Milford Flats South SESAs are appropriate candidates for renewable development. SUWA requests that the Agencies prioritize the development of these two proposed SESAs.

C. SUWA Suggests that the Agencies Reconsider the Wah Wah Valley Solar Energy Study Area.

SUWA suggests that the Agencies reconsider development of the Wah Wah Valley SESA. Unlike the Escalante Valley and the Milford Flats South SESAs, the Wah Wah Valley SESA does not lie near existing high-capacity transmission lines (it merely lies along a proposed Section 368 Energy Corridor). *See* West Wide Energy Corridor Final PEIS, *available at* http://corridoreis.anl.gov/eis/fmap/sbm/index.cfm.

Importantly, the Wah Wah Valley is surrounded on both the east and the west by areas proposed for wilderness designation in America's Red Rock Wilderness Act. *See* Wild Utah Project Map attached as Exhibit G. Although the Wah Wah Valley SESA is not within an area proposed for wilderness in ARRWA, the Wah Wah Valley retains a wild and generally undisturbed character, as well as impressive visual resources. This remote basin and range complex exhibits an overwhelming sense of isolation and wild character that is slowly becoming a dwindling resource in America. Any development, small or large scale in the Wah Wah Valley would impact the undeveloped nature of this region. In addition, the wilderness experience from the San Francisco Mountains east of the valley and the Wah Wah Mountains west of the valley would be affected by a large solar development that would change the character of the region and dramatically affect the experience of recreationists who visit this remote and wild region of Utah.

In addition, unlike the Escalante Valley and the Milford Flats South SESAs, which are located on lands governed by the Cedar Beaver Garfield Antimony Resource Management Plan ("CBGA RMP"), the management guidance for the lands in the Wah Wah Valley comes from the Pinyon Management Framework Plan ("MFP"), which was completed 26 years ago, in 1983. MFPs are very different documents from RMPs. The primary distinction is that RMPs are considered major federal actions under the National Environmental Policy Act, and necessitate the preparation of an Environmental Impact Statement ("EIS"). 43 C.F.R. 1601.0-6; *see* 40 C.F.R. § 1502. The completion of an MFP, however, does not necessitate the completion of an EIS, or even an Environmental Assessment. *See* 40 C.F.R. § 1508.10; *Southern Utah Wilderness Alliance (SUWA), et al.*, 164 IBLA 118, 124 (2004).

According to regulations governing the BLM, 43 C.F.R. § 1610.8(a)(1), MFPs may serve as the basis for considering proposed actions, but only until superseded by

RMPs. These regulations governing MFPs were published in 1979 and the drafters envisioned that MFPs would govern land management only for a "transition period" until RMPs could be completed. *See* 43 C.F.R. § 1610.8(b) (1979); *SUWA*, 164 IBLA at 124. Thirty years after these regulations were passed, the outdated Pinyon MFP remains the governing management document for the Wah Wah Valley.

Because of the difference between MFPs and RMPs, and the corresponding lack of environmental analysis in the Pinyon MFP, different considerations apply to the Wah Wah Valley SESA than the other two SESAs. The Agencies must ensure that BLM completes any additional analysis required for the Wah Wahy Valley SESA due to the lack of an existing RMP and EIS for the region. In particular, section 201 of the Federal Land Policy and Management Act ("FLPMA") requires that BLM conduct periodic resource inventories and keep these inventories current. 43 U.S.C. § 1711. Under FLPMA, BLM "shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values . . . This inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values." 43 U.S.C. § 1711(a). Thus, FLPMA requires BLM to identify any visual resources that exist by conducting visual resource inventories and repeating these inventories as necessary to keep them current. Therefore, BLM is required to consider whether, and to what extent, visual resource values are now present in the Wah Way Valley and, if the values are present, how development of the Wah Wah Valley SESA would impact these values. As far as SUWA knows, the last visual resources inventory of the Wah Wah Valley occurred with the preparation of the Pinyon MFP, prior to 1983. See Pinyon MFP at Appendix VR.

In addition, because the Wah Wah Valley SESA is located further from existing transmission lines and remains relatively undisturbed, solar development in the Wah Wah Valley would result in more surface disturbance and would create a concomitant increase in soil erosion and dust, which would have ecological and health impacts, as discussed above. *See, e.g.*, Exhibit D, photos taken in July 2009 in southwestern Utah's Pine Valley, one valley west of the Wah Wah Valley, and one of the light blue areas on the SESA Map prepared June 5, 2009; Streater, Scott, *Climate Change, Water Shortages Conspire to Create 21st Century Dust Bowl*, THE NEW YORK TIMES, (May 14, 2009) (article mentions probable escalation of the dust problem due to renewable energy development) (attached as Exhibit H); Nelson, Paul, *Health Experts Warn Utah Residents to Prepare for the Dust*, KSL NEWS, (July 8, 2009) (attached as Exhibit I).

For these reasons, SUWA suggests that the Agencies reconsider the development of the Wah Wah Valley SESA, and prioritize the development of the Escalante Valley and Milford Flats SESAs.

D. The Solar PEIS Should Consider an Alternative that Discourages the Development of Solar Power Plants that Use Significant Amounts of Water.

Water is of paramount importance in Utah and throughout desert Southwest, and solar energy development has the potential to consume significant quantities of water. In developing renewable energies to help combat climate change, the Agencies must be careful not to exacerbate one of the effects of climate change: diminishing precipitation and water supplies on the Colorado Plateau and throughout southwestern Utah. *See, e.g.*, U.S. Geological Survey, *Impacts of Climate Change on Water and Ecosystems in the Upper Colorado River Basin* (August 2007) (attached as Exhibit J); Union of Concerned Scientists, *Southwest: Arizona, California, Colorado, Nevada, New Mexico, West Texas, Utah*, GLOBAL CLIMATE CHANGE IMPACTS IN THE UNITED STATES (2009) (attached as Exhibit K). Because of the projected outlook of decreased precipitation on the Colorado Plateau and throughout southwestern Utah, it is important that the Solar PEIS thoroughly analyze the impacts that the development of the proposed SESAs could have on water quantity and quality, groundwater levels, downstream users, and other individuals and industries that use water in Utah and throughout the Southwest.

Although water-cooled solar power plants are the most efficient, such plants may not be practical for desert regions of southwestern Utah. SUWA urges the Agencies to adopt policies in the PEIS that encourage reduced water consumption. For example, the PEIS should consider alternatives, or a combination of alternatives, that discourage the use of water-cooled plants and require power plants to be air-cooled, or that require plants to use reclaimed or brackish water for cooling. Similarly, the PEIS should consider alternatives that significantly reduce the amount of water needed to run solar power plants or that require mitigation for the water use.

E. The Solar PEIS Should Analyze The Impact of Solar Development on Dark Night Skies.

Utah is blessed with some of the darkest night skies in the western United States. As an example, Natural Bridges National Monument in southeastern Utah was recently named the first international dark skies park. National Park Service, Natural Bridges Named the World's First International Dark-Sky Park, *available at* <u>http://www.nps.gov/nabr/parknews/news040507.htm</u> (April 2007) (last visited Sept. 5, 2009). It is important to protect such dark sky areas, as these rare places are currently protected from the light pollution that pervades most of the country.

As stated above, the Escalante Valley and Milford Flats South SESAs are located in places where development has already occurred, and light pollution therefore presents less of an issue. The Wah Wah Valley SESA is, by contrast, in an area that has seen little development, and a solar power plant in the valley has the potential to significantly impact the area's dark skies. Importantly, the University of Utah is in the process of constructing an optical telescope that depends on dark skies. The telescope will be

located on San Francisco Peak in the mountains rising up from the Wah Wah Valley's eastern side. To ensure that large-scale solar development will not unnecessarily affect dark night skies, the Solar PEIS should analyze the impact that the proposed SESAs, and the Wah Wah Valley SESA in particular, will have on southwestern Utah's dark night skies.

F. Comments Regarding the Areas that Appear in Light Blue on the Solar Energy Study Area Map.

Although it appears that the Solar PEIS will focus on the proposed Solar Energy Study Areas, the Map entitled Solar Energy Study Areas in Utah states that the lands that appear in light blue are also being analyzed for solar development in the Solar PEIS. Although information on all of the light blue areas in the state has not been provided to the public at this time, there are many light blue areas that would present significant concerns to SUWA if solar development were proposed for those areas.

For example, the Parowan Gap area, containing rare and unique petroglyphs and what is thought to be a prehistoric astronomical site, is depicted in light blue on the SESA Map. Given the cultural importance of this site, no development of any kind should occur here. It is highly likely that other such conflicts exist in the light blue areas in southwestern Utah and throughout the state. Should proposed development of any of the areas currently appearing in light blue on the SESA Map progress, SUWA will provide comments on those areas at that time.

CONCLUSION

SUWA is excited about the prospect of renewable energy development throughout in Utah, and is dedicated to ensuring that such development occurs in a responsible manner and where appropriate. SUWA commends the Agencies' efforts to screen out and exclude sensitive lands from large-scale solar development. SUWA strongly supports the development of the Escalante Valley and Milford Flats South SESAs, and suggests that the Agencies reconsider development of the Wah Wah Valley SESA.

SUWA is grateful for the Agencies' efforts to involve the public early in the solar energy development process, and hopes that early collaboration will alleviate disputes further along in the process. Thank you for your consideration of these scoping comments. We look forward to remaining involved in the Solar PEIS process.

Sincerely,

Tiffany Bartz Southwestern Field Attorney