

May 16, 2012

BLM Arizona State Office Attn: Restoration Design Energy Project Manager One North Central Avenue, Suite 800 Phoenix, AZ 85004

TRANSMITTED VIA E-MAIL

RE: BLM Arizona's Draft Environmental Impact Statement for the Restoration Design Energy Project

The Solar Energy Industries Association (SEIA) is grateful for the opportunity to submit these comments to the Bureau of Land Management Arizona State Office (BLM Arizona) for consideration regarding the Draft Environmental Impact Statement (Draft EIS) for the Restoration Design Energy Project (RDEP). These comments are additive to the information submitted by the Arizona Solar Working Group and signed-on to by SEIA.

I. About SEIA and the Solar Industry

Established in 1974, the Solar Energy Industries Association (SEIA) is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA is building a strong solar industry to power America. As the voice of the industry, SEIA works with its 1,100 member companies to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

Today, the solar energy industry is one of the fastest growing sectors in the U.S., growing 109% over the past year, and employing 100,000 American workers in 5,500 companies in all 50 states. Within the solar energy industry, utility-scale solar is thriving with 1,790 MW in operation and a further 4,573 MW under construction, mostly in the U.S. southwest. In fact, in the past two years, BLM has approved 25 major renewable energy projects, including 15 utility-scale solar power projects on public lands.

Solar Energy Industries Association and GTM Research, "U.S. Solar Market Insight: 2011 Year-In-Review, Executive Summary" at p. 2 (http://www.slideshare.net/SEIA/us-solar-market-insight-report).

Solar Energy Industries Association and GTM Research, "U.S. Solar Market Insight: 3rd Quarter 2011" at p. 3 (http://www.seia.org/galleries/pdf/SMI-Q3-2011-ES.pdf).

[&]quot;Utility-Scale Solar Power Projects in the United States Operating, Under Construction, or Under Development," Solar Energy Industries Association, updated May 9, 2012 (http://www.seia.org/galleries/pdf/Major Solar Projects.pdf).

Together, these projects comprise 6,200 MW of new generation capacity, enough to power 2.2 million American homes, and will create nearly 12,000 construction and operational jobs. ⁴ More recently, President Obama, in his State of the Union address, directed his Administration to permit enough clean energy generation or projects on public land to power three million homes. ⁵ Continuing BLM's momentum and achieving the President's goal depends on the suitability and commercial attractiveness of public land in states like Arizona.

II. <u>Background</u>

On February 17, 2012, BLM Arizona issued a Draft Environmental Impact Statement for the Restoration Design Energy Project. The purpose of RDEP is two-fold: to "amend BLM land use plans to identify lands across Arizona that may be suitable for renewable energy development and to establish a baseline set of environmental protection measures for such projects." In addition, the Draft EIS identifies one area to be designated as a Solar Energy Zone (SEZ), in conformance with BLM's national effort in the Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (Solar PEIS).

RDEP specifically seeks to identify lands suitable for renewable energy development on previously disturbed sites like "brownfields, landfills, retired agricultural lands or abandoned mines." RDEP also seeks "lands with low resource sensitivity and few environmental conflicts." Once identified, these lands may be classified as Renewable Energy Development Areas, or REDAs, and the attendant resource management plans amended. In contrast to the Solar Energy Zones being developed in the Solar PEIS, the acres within a REDA and any permitting requirements for development in a REDA apply to renewable energy projects of any size. ⁷

III. RDEP Does Not Address the Primary Challenges to Solar Development in Arizona

We commend BLM Arizona for taking on the challenge of synthesizing data from disparate agencies and sources to create a fuller picture of what renewable energy development could result in the state. The solar industry is committed to responsible energy development, avoiding impacts when possible and mitigating them when it is not. We are also encouraged by BLM Arizona's recognition of the state's potential to be a future exporter of renewable energy.

[&]quot;Salazar Continues to Advance Renewable Energy Development on Public Lands," BLM Press Release, Dec. 20, 2011
(http://www.blm.gov/wo/st/en/info/newsroom/2011/december/NR 12 20 2011.html).

⁵ President Barack Obama, State of the Union Address (Jan. 24, 2012).

⁶ Arizona Restoration Design Energy Project Draft EIS, p. 1-1.

The Solar Energy Program being codified in the Solar PEIS applies only to development of solar projects 20 MW or greater.

However, RDEP does not address the primary challenges to solar development in Arizona. In order for a solar power plant to be commercially viable and financeable, a developer must locate a site with plentiful solar resource, access to transmission and secure a long-term power purchase agreement from a utility. Arizona's solar resources are the envy of the Southwest. Like much of the West, though, transmission capacity available to transmit electricity from a new power plant is at a premium. As discussed below, BLM's analysis fails to properly account for the transmission necessary to supply solar power both in-state and out-of-state. Finally, RDEP cannot create the key ingredient for a successful solar project: a willing buyer for the electricity. Arizona's deployment of solar photovoltaics in 2011 put it in third place nationally. Continuing this trend – and making the export of solar energy from Arizona easier – will allow the state to harness its most abundant natural resource.

On the siting front, we are not convinced that RDEP's goals will result in the optimal development pattern for solar energy in Arizona. RDEP's focus on reusing previously disturbed lands is commendable. For some previous uses, solar is a natural fit. There are several examples around the state of solar power plants being sited on lands that were previously in agricultural use. Specifically, Abengoa Solar's Solana plant was formerly an alfalfa farm and First Solar's Agua Caliente power plant is the site of a former melon farm. Similarly, capped landfills have been the site of several power plants around the country.

Other previous uses, though, pose more of a challenge. Brownfields, abandoned mines and any site requiring remediation prior to development require significantly more time, expertise and financial resources on the developer's part. Resolution of liability issues alone could take years and significant attorney fees. There is scant evidence to show that today's solar developers have the necessary resources or inclination to undertake such a development. Indeed, EPA's RE-Powering America program, which aims to redevelop contaminated or brownfield sites with renewable energy, only highlights solar success stories on former landfills, not on any brownfields. ⁸

Finally, one of the greatest impediments to solar development on public lands in Arizona has been the cost, both of permitting such lands and the rental fees a developer is required to pay once a right-of-way has been issued. The stated goal of securing both small- and utility-scale solar development on BLM-managed lands in Arizona will not be met without changing the economics of development. We discuss this issue more fully later in these comments.

IV. <u>BLM Should Adopt Alternative 6 with Modifications</u>

A guiding principal of project development is the need for flexibility. While there are certainly places that are unsuitable for solar development, it should be largely left to the developer's expertise to choose a site for a new solar power plant. This allows the developer to find the "sweet spot" where

Solar projects at Fort Carson and Nellis Air Force Base are highlighted here: http://www.epa.gov/oswercpa/successstories.htm#carson.

good solar resources, few environmental conflicts, access to available transmission capacity and a power purchase agreement align.

In the context of identifying lands with low conflicts and potential to meet BLM's goal of reusing previously disturbed land, we support BLM's Preferred Alternative, Alternative 6, with the modifications described below.

V. <u>BLM's Approach to Transmission is Flawed</u>

In Alternative 2, BLM eliminates all REDAs not within five miles of "existing or certified transmission lines" of 230 kV or greater. This same requirement is carried into Alternative 6, the Preferred Alternative. BLM's stated goal is to identify areas that "are close enough to existing transmission facilities as to make it efficient and cost effective to bring the energy on-line." There are three major flaws with this approach.

First, BLM incorrectly assumes that the existence of a transmission line is indicative of enough available transmission capacity to effectively transport power from the generating location to a load center. One can only know how much capacity is available after conducting a power flow model and contingency analysis. These analyses are complex and resource-intensive and are best undertaken by the responsible transmission planning entities. In addition, the "queue" for use of any available transmission may be crowded with requests for service for other projects, thus providing little or no assurance that any transmission capacity will be available for an additional project.

Second, minimizing the distance between generation and the nearest transmission line does not assure the least environmental impact. The transmission grid is a vast, integrated network. Adding power to one spot on the transmission grid will cause impacts elsewhere on the system. It is not uncommon for a developer to learn that interconnecting to a particular substation ten miles away will cause fewer grid impacts — and fewer environmental impacts — than interconnecting to a substation only four miles away. Again, this information can only be known as a result of the system impact study. If BLM insists upon an arbitrary standard of less than five miles to transmission, the result will be suboptimal development of both solar generation resources and transmission infrastructure.

Finally, while limiting the analysis to transmission lines 230 kV and above may be acceptable when contemplating utility-scale solar development. However, RDEP seeks to attract projects of less than 20 MW, as well, which could interconnect to transmission or distribution facilities at a much lower voltage level.

⁹ Arizona Restoration Design Energy Project Draft EIS, Figure 2-5, p. 2-21.

¹⁰ Ibid, p. 2-36.

The Arizona Solar Working Group is proposing further conversation about transmission and SEIA looks forward to those recommendations. At a minimum, in the Final EIS BLM should eliminate the 230 kV threshold and the requirement that a REDA be no more than five miles from an existing transmission line.

VI. BLM Should Provide Processing and Economic Incentives for Development within REDAs

While the Draft EIS does not specify any incentives that will accrue to developers of renewable energy projects within REDAs, it leaves open the opportunity for commenters to suggest them. As was discussed above, one of the greatest impediments to solar development on public lands in Arizona is the cost involved, both from the processing standpoint and the rent charged once a right-of-way is granted.

We note that the RDEP process does have some built-in incentives for developers to site projects in REDAs, namely the amendment of Land Use Plans to designate REDAs as priority areas for solar development and the ability to tier environmental analysis to the analysis in the RDEP EIS. However, further incentives are necessary to encourage developers to site their projects within REDA boundaries.

A. Processing Incentives

Our assumption is that faster, more streamlined permitting will come with locating a project in a REDA, given that these areas have already been screened and determined to be "low conflict" areas. We encourage Arizona BLM to make clear its expectation of a faster permitting process. In addition, we suggest that REDA applications automatically qualify for the "Priority Projects" list or other priority processing scheme that BLM institutes. Finally, establishing a comprehensive mitigation program for developers to take part in would benefit both developers and Arizona BLM. The goal of such a program should be to reduce costs to the developer while better meeting the mitigation needs of Arizona BLM. Up-front information about what mitigation is necessary and a list that outlines options a developer may take to satisfy the mitigation requirements would create a smoother process for all involved.

B. Economic Incentives

To date, only one solar project has been permitted on BLM-managed lands in Arizona. To make the REDAs more attractive to developers, we propose these economic incentives. Many of these proposals mimic the current policies for utility-scale (greater than 20 MW) solar projects, as spelled out in several 2011 Instructional Memoranda. These economic incentives should accrue to any project in a REDA, regardless of its size.

A long-term lease is of great importance to solar developers, as the ROW term needs to match the duration of the power purchase agreement signed with the utility customer plus the project's construction time. Therefore, we request a minimum ROW term of 30 years, with the opportunity to renew. In addition, we suggest that ROW grants have a flexible duration, such that the applicant could choose an initial ROW grant of more than 30 years, if so desired.

In addition, lower rental fees will make development in REDAs a more attractive proposition. BLM's Washington Office established a solar rent policy in 2010, which we accept as the basis for any rents charged to projects within REDAs. We suggest the following changes: (1) provide a 30% discount off of whatever BLM would ordinarily charge for a solar project in that county; and (2) eliminate any future escalation in rental rates¹¹ by locking in the rental payments for the duration of the ROW grant. Leave in place the existing policy that phases in rental payments in the early years of a project, such that the maximum rent paid during any year of the ROW grant is rent one would calculate when a project is fully operational, minus the 30% discount.

Some may argue that granting such economic incentives flies in the face of the requirement that BLM collect "fair market value" when it rents land to private users. We disagree. The rents established by BLM tend to overestimate the value of the land, relying on figures for irrigated farmland, rather than separating the land value from the value of the water rights. In some counties, BLM rents can be twice the price of comparable private land. Secondly, BLM has wide discretion to determine what constitutes an appropriate rental rate. To the extent that BLM is prioritizing development within REDAs as a matter of policy, it can and should offer incentives that persuade developers to similarly prioritize development within those areas. At a minimum, BLM should immediately reassess its current solar rent policy to ensure that stated rents reflect accurate and fair appraisals of land in the West.

VII. Agua Caliente Solar Energy Zone

We support BLM's desire to establish a new Solar Energy Zone near Agua Caliente. As the Draft EIS indicates, the proximity of this site to existing infrastructure makes it a generally attractive location. However, we urge BLM not to adopt the boundaries established by Alternative 6, the Preferred Alternative. When considering a new SEZ, one of the most important features is to ensure that there are enough acres in a single parcel to support development of multiple utility-scale solar energy power plants. On the surface, 6,770 acres appears to be capable of supporting approximately 600 MW of solar development. However, those acres are spread across three distinct parcels of land, a configuration which does not ensure that the SEZ will be commercially attractive to developers. Instead, we encourage BLM to go back to the original boundaries in Alternative 1 and reassess the suitability of the entire area for designation as a SEZ.

The current Solar Energy Rental Policy (BLM IM 2010-141) dictates an annual escalation of 1.9% (based on the Implicit Price Deflator-Gross Domestic Product index) for the base rent calculated for each county.

Though not an extreme case, it is instructive to note that a recent Arizona Public Service project was announced on Arizona State Trust Lands for a total lease of \$10 million. Had this project been on BLM-managed lands, the total rent collected would be nearly \$11.7 million. See http://www.businesswire.com/news/home/20120403006963/en/State-Land-Department-APS-Partner-First-Ever-Solar for project details.

¹³ In early 2011, BLM indicated that it would reassess the solar rent policy five years hence.

VIII. Conclusion

SEIA is supportive of BLM's continued efforts to promote responsible solar development on public lands. The Restoration Energy Design Project is one aspect of increasing the solar capacity built in Arizona, but designating Renewable Energy Development Areas will not overcome all of the challenges developers face in bringing a project to fruition. As described above, BLM should adopt Alternative 6, with modifications, in the Final EIS. In addition, incentives should be provided to developers, making REDAs a more attractive place to site a solar power plant of any size. Arizona has some of the best solar resources in the entire country. BLM should ensure that it is not a hindrance to tapping that vast energy potential and ensuring a clean, diverse and abundant supply of domestic energy.

Thank you for your consideration of these comments.

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Respectfully submitted,

Katherine Gensler

Director, Regulatory Affairs Solar Energy Industries Association 575 7th Street NW, Suite 400 Washington, DC 20004 (202) 556-2873

kgensler@seia.org