Thank you for your comment, Greg Suba.

The comment tracking number that has been assigned to your comment is SolarM60269.

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Comment Submitted:

I am submitting comments on behalf of the California Native Plant Society. Our comments are detailed in the attached file, "CNPS_Solar Energy PEIS.pdf"

Greg Suba



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

Re: Scoping Comments on the California Solar Energy Study Areas (SESAs) for the Solar PEIS

To whom it may concern: Please accept and fully consider these comments on behalf of The California Native Plant Society.

The mission of The California Native Plant Society (CNPS) is to increase understanding and appreciation of California's native plants and to conserve them and their natural habitats through education, science, advocacy, horticulture and land stewardship.

CNPS supports renewable energy generation via large-array utility scale projects only when sited on already-disturbed lands, e.g., brownfield and fallow agricultural lands. We oppose the siting of large-array renewable energy projects sited in functionally intact desert areas on public trust lands, especially <u>as the first option</u>. Alternative lands where large-array solar projects can provide renewable energy demands while preserving the functional integrity of intact desert ecosystems have been identified and mapped by a coalition of conservation organizations based on the renewable energy project Siting Criteria outlined in Attachment A of our letter. These criteria and the map of identified alternative lands have been submitted to the BLM in a separate SESA PEIS scoping comment letter jointly submitted on behalf of several California-based and national conservation organization, including CNPS.

CNPS makes the following recommendations regarding the scope of the BLM SESA PEIS.

• We recommend that the PEIS review and prioritize the 13 SESAs in order of highest to least ecological impact and remove the SESAs posing the highest ecological threats. CNPS believes the Iron Mountain SESA in California will rank most highly on this list and should be removed from consideration for *any* renewable energy project development. The lands in the Iron Mountain SESA represent a wilderness-locked area where botanical characteristics are largely unknown, and whose access is extremely limited. Development of renewable energy projects in the proposed Iron Mountain SESA would introduce avoidable and immitigable impacts (severing of migration corridors, introduction of invasive plant and animal species into an intact and isolated desert ecosystem) to this area, and would be inconsistent with the Siting Criteria developed by the coalition of desert conservation groups (Attachment A).

• In California, the SESA Programmatic EIS, and the joint state and federal Desert Renewable Energy Conservation Plan will engage in landscape level analysis for siting of renewable energy development in the California desert. This type of comprehensive planning is needed to address management actions that will ensure the long-term conservation of the desert ecosystem. Conservation planning through these two processes must be coordinated to consider **all** project applications, including those currently progressing through entitlement and certification phases outside of the more comprehensive landscape-level planning approaches.

Coordination is particularly important in terms of the areas identified for development and the appropriate mitigation strategies for solar projects. If there are disagreements between BLM, CDFG, and/or other state (or federal) agencies regarding these key issues, they should be resolved at least tentatively in advance (subject to the legal obligations and discretion of each agency) and as promptly as possible. If these questions are not addressed early on, the alternative is an iterative process that could delay projects by years and require substantial revisions to early efforts to respond to later, potentially differing, regulatory processes.

• In addition to addressing the need to preserve landscape-scale functionality of intact desert habitat when siting large-array solar projects, the BLM must also address the need to conserve individual rare, threatened and endangered plant taxa within the 4 California SESAs when developing the SESA PEIS. CNPS recommends the SESA PEIS address project impacts to rare, threatened, and endangered plants within study areas by following policies and guidelines outlined in BLM Special Status Plan Management Manual 6840-1, and BLM Management Manual Supplement H-6840.06, both available on-line via the BLM website (on September 14, 2009) at (respectively):

In particular, CNPS recommends that the SESA PEIS maintain the following BLM policies and guidelines:

- 1. Federally listed threatened and endangered plant taxa, and those proposed for federal listing will be addressed as per the requirements of the federal Endangered Species Act.
- 2. For Candidate Plant Species, the BLM will carry out management, consistent with the principles of multiple use, for the conservation of candidate plant species and their habitats and will ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered. Specifically, the BLM will adopt the guidelines outlined in BLM Special Status Plant Manual Supplement 6840-06 section C.
- 3. California State listed plants and CNPS List 1B plants are recognized as BLM Sensitive Plant Species and will be given the same level of protection as Candidate Plant Species and all of the policy statements given for candidate species apply equally to sensitive plant species (cf. BLM Special Status Plant Manual Supplement 6840-06 section C).
- 4. The probability of occurrence of rare plants must be considered as High, project's Habitat Disturbance Level within each SESA much be considered as High, and therefore all botanical inventories conducted as part of an environmental review within each SESA must meet a minimum intensity level of Complete as defined in BLM Special Status Plan Management Manual 6840-1 sections III.E.1 and III.E.2.
- 5. Many special status plant inventories of public lands conducted to assess the impacts of a project are performed by consultants hired by project proponents. Personnel conducting botanical inventories within SESAs must have strong backgrounds in plant taxonomy, plant ecology, field sampling design and methods, and knowledge of the floras of the area to be inventoried. Such qualifications help to ensure that all special status plants occurring in the area to be inventoried will be located, including those that were not predicted to occur at the start of the inventory. Therefore, botanical survey personnel requirements must meet the qualifications outlined in BLM Special Status Plan Management Manual 6840-1 section III.D.1.
- 6. In order for the BLM to adequately determine the quality of such third party inventories, CNPS recommends botanical surveys be conducted as per the CNPS *Botanical Survey Guidelines* and the California Department of Fish & Game *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities.*

• CNPS recommends that the SESA PEIS also assess project impacts to plant taxa occurring within California's SESAs that are considered rare within California but more common elsewhere. These taxa represent plants occurring at the periphery of their population ranges and whose genetic stock may represent biological factors critical to a taxon's ability to adapt to changing climatic conditions. These plant taxa are listed as CNPS List 2 plants.

California SESA botanical concerns

The botanical resources of the California Desert Conservation Area (CDCA) are largely unknown as much of the area has not been surveyed floristically. This is especially the case within the Iron Mountain SESA.

Based on botanical information from the California Natural Diversity Database (CNDDB), and from herbaria specimens, we make the following recommendation regarding the four California SESAs.

Pisgah SESA

We recommend reducing this study area to avoid impacts to sensitive resources. Rare plant issues within the Pisgah SESA include known occurrences of: Penstemon albomarginatus Androstephium breviflorum Castela emory

Iron Mountain SESA

We recommend eliminating this SESA due to the high occurrence of sensitive resources and general inconsistency with our siting criteria. The botanical resources of the Iron Mountain SESA are largely unknown. Rare plant issues within the Iron Mountain SESA include known occurrences of: *Androstephium breviflorum*

Eriastrum harwoodii

Riverside East SESA

We believe this SESA should be reduced to avoid impacts to rare plants and other sensitive resources. Rare plant taxa within the Riverside East SESA include known occurrences of:

Cryptantha costata Proboscidea althaeifolia Colubrina californica Senna covesii Ditaxis californica Ditaxis claryana Abronia villosa var. aurita Hymenoxys odorata Teucrium cubense ssp. depressum Wislizenia refracta ssp. refracta Grusonia parishii Astragalus insularis var. harwoodii Corypantha alversonii Castela emoryi

The sand dune habitats at the eastern end of the Eagle Mountains currently support two CNPS listed rare plants: *Cryptantha costata Eriastrum harwoodii* and one watchlist plant: *Astragalus aridus*

Furthermore, the western half of the Iron Mountain SESA is microphyll woodland and represents a transition zone between Mojave and Sonoran ecoregions, and as such represents an ecological important vegetation community.

Imperial East SESA

Based on currently available information there are few anticipated resource conflicts with this proposed SESA. Local CNPS members are researching the botanical resources within this SESA.

The California Native Plant Society appreciates the opportunity to provide these comments regarding the scoping requirements of the SESA PEIS, and will continue to remain actively involved throughout all phases of the BLM SESA planning effort. Our goal in this regard is to assist the BLM to develop the best possible environmental assessment in a timely manner that provides effective, long-term protective policies for preserving our biological resources in the California Desert while addressing the permitting process for renewable energy projects.

Respectfully, Greg Suba Conservation Program Director California Native Plant Society 2707 K Street Sacramento, CA 95816



Dedicated to the preservation of California native flora

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ATTACHMENT A

Audubon California California Native Plant Society * California Wilderness Coalition Center for Biological Diversity * Defenders of Wildlife Desert Protective Council * Mojave Desert Land Trust National Parks Conservation Association Natural Resources Defense Council * Sierra Club * The Nature Conservancy The Wilderness Society * The Wildlands Conservancy

Renewable Siting Criteria for California Desert Conservation Area

Environmental stakeholders have been asked by land management agencies, elected officials, other decision-makers, and renewable energy proponents to provide criteria for use in identifying potential renewable energy sites in the California Desert Conservation Area (CDCA). Large parts of the California desert ecosystem have survived despite pressures from mining, grazing, ORV, real estate development and military uses over the last century. Now, utility scale renewable energy development presents the challenge of new land consumptive activities on a potentially unprecedented scale. Without careful planning, the surviving desert ecosystems may be further fragmented, degraded and lost.

The criteria below primarily address the siting of solar energy projects and would need to be further refined to address factors that are specific to the siting of wind and geothermal facilities. While the criteria listed below are not ranked, they are intended to inform planning processes and were designed to provide ecosystem level protection to the CDCA (including public, private and military lands) by giving preference to disturbed lands, steering development away from lands with high environmental values, and avoiding the deserts' undeveloped cores. They were developed with input from field scientists, land managers, and conservation professionals and fall into two categories: 1) areas to prioritize for siting and 2) high conflict areas. The criteria are intended to guide solar development to areas with comparatively low potential for conflict and controversy in an effort to help California meet its ambitious renewable energy goals in a timely manner.

Areas to Prioritize for Siting

• Lands that have been mechanically disturbed, i.e., locations that are degraded and disturbed by mechanical disturbance:

- Lands that have been "type-converted" from native vegetation through plowing, bulldozing or other mechanical impact often in support of agriculture or other land cover change activities (mining, clearance for development, heavy off-road vehicle use).¹

- Public lands of comparatively low resource value located adjacent to degraded and impacted private lands on the fringes of the CDCA:²
 - Allow for the expansion of renewable energy development onto private lands.
 - Private lands development offers tax benefits to local government.

- Brownfields:
 - Revitalize idle or underutilized industrialized sites.
 - Existing transmission capacity and infrastructure are typically in place.
- Locations adjacent to urbanized areas:³
 - Provide jobs for local residents often in underserved communities;
 - Minimize growth-inducing impacts;
 - Provide homes and services for the workforce that will be required at new energy facilities;
 - Minimize workforce commute and associated greenhouse gas emissions.
- Locations that minimize the need to build new roads.
- Locations that could be served by existing substations.
- Areas proximate to sources of municipal wastewater for use in cleaning.
- Locations proximate to load centers.
- Locations adjacent to federally designated corridors with existing major transmission lines.⁴

High Conflict Areas

In an effort to flag areas that will generate significant controversy the environmental community has developed the following list of criteria for areas to avoid in siting renewable projects. These criteria are fairly broad. They are intended to minimize resource conflicts and thereby help California meet its ambitious renewable goals. The criteria are not intended to serve as a substitute for project specific review. They do not include the categories of lands within the California desert that are off limits to all development by statute or policy.⁵

- Locations that support sensitive biological resources, including: federally designated and proposed critical habitat; significant⁶ populations of federal or state threatened and endangered species,⁷ significant populations of sensitive, rare and special status species,⁸ and rare or unique plant communities.⁹
- Areas of Critical Environmental Concern, Wildlife Habitat Management Areas, proposed HCP and NCCP Conservation Reserves.¹⁰
- Lands purchased for conservation including those conveyed to the BLM.¹¹
- Landscape-level biological linkage areas required for the continued functioning of biological and ecological processes.¹²

• Proposed Wilderness Areas, proposed National Monuments, and Citizens' Wilderness Inventory Areas.¹³

- Wetlands and riparian areas, including the upland habitat and groundwater resources required to protect the integrity of seeps, springs, streams or wetlands.¹⁴
- National Historic Register eligible sites and other known cultural resources.
- Locations directly adjacent to National or State Park units.¹⁵

EXPLANATIONS

¹Some of these lands may be currently abandoned from those prior activities, allowing some natural vegetation to be sparsely re-established. However, because the desert is slow to heal, these lands do not support the high level of ecological functioning that undisturbed natural lands do.

²Based on currently available data.

³Urbanized areas include desert communities that welcome local industrial development but do not include communities that are dependent on tourism for their economic survival.

⁴The term "federally designated corridors" does not include contingent corridors.

⁵Lands where development is prohibited by statute or policy include but are not limited to: National Park Service units; designated Wilderness Areas; Wilderness Study Areas; BLM National Conservation Areas; National Recreation Areas; National Monuments; private preserves and reserves; Inventoried Roadless Areas on USFS lands; National Historic and National Scenic Trails; National Wild, Scenic and Recreational Rivers; HCP and NCCP lands precluded from development; conservation mitigation banks under conservation easements approved by the state Department of Fish and Game, U.S. Fish and Wildlife Service or Army Corps of Engineers a; California State Wetlands; California State Parks; Department of Fish and Game Wildlife Areas and Ecological Reserves; National Historic Register sites.

⁶Determining "significance" requires consideration of factors that include population size and characteristics, linkage, and feasibility of mitigation.

⁷Some listed species have no designated critical habitat or occupy habitat outside of designated critical habitat. Locations with significant occurrences of federal or state threatened and endangered species should be avoided even if these locations are outside of designated critical habitat or conservation areas in order to minimize take and provide connectivity between critical habitat units.

⁸Significant populations/occurrences of sensitive, rare and special status species including CNPS list 1B and list 2 plants, and federal or state agency species of concern.

⁹Rare plant communities/assemblages include those defined by the California Native Plant Society's Rare Plant Communities Initiative and by federal, state and county agencies.

¹⁰ACECs include Desert Tortoise Desert Wildlife Management Areas (DWMAs). The CDCA Plan has designated specific Wildlife Habitat Management Areas (HMAs) to conserve habitat for species such as the Mohave ground squirrel and bighorn sheep. Some of these designated areas are subject to development caps which apply to renewable energy projects (as well as other activities).

¹¹These lands include compensation lands purchased for mitigation by other parties and transferred to the BLM and compensation lands purchased directly by the BLM.

¹²Landscape-level linkages provide connectivity between species populations, wildlife movement corridors, ecological process corridors (e.g., sand movement corridors), and climate change adaptation corridors. They also provide connections between protected ecological reserves such as National Park units and Wilderness Areas. The long-term viability of existing populations within such reserves may be dependent upon habitat, populations or processes that extend outside of their boundaries. While it is possible to describe current wildlife movement corridors, the problem of forecasting the future locations of such corridors is confounded by the lack of certainty inherent in global climate change. Hence the need to maintain broad, landscape-level connections. To maintain ecological functions and natural history values inherent in parks, wilderness and other biological reserves, trans-boundary ecological processes must be identified and protected. Specific and cumulative impacts that may threaten vital corridors and trans-boundary processes should be avoided.

¹³Proposed Wilderness Areas: lands proposed by a member of Congress to be set aside to preserve wilderness values. The proposal must be: 1) introduced as legislation, or 2) announced by a member of Congress with publicly available maps. Proposed National Monuments: areas proposed by the President or a member of Congress to protect objects of historic or scientific interest. The proposal must be: 1) introduced as legislation or 2) announced by a member of Congress with publicly available maps. Citizens' Wilderness Inventory Areas: lands that have been inventoried by citizens groups, conservationists, and agencies and found to have defined "wilderness characteristics." The proposal has been publicly announced.

¹⁴The extent of upland habitat that needs to be protected is sensitive to site-specific resources. For example: the NECO Amendment to the CDCA Plan protects streams within a 5-mile radius of Townsend big-eared bat maternity roosts; aquatic and riparian species may be highly sensitive to changes in groundwater levels.

¹⁵Adjacent: lying contiguous, adjoining or within 2 miles of park or state boundaries. (Note: lands more than 2 miles from a park boundary should be evaluated for importance from a landscape-level linkage perspective, as further defined in footnote 12).