

# 1 INTRODUCTION

## 1.1 OVERVIEW

On December 17, 2010, the U.S. Department of the Interior Bureau of Land Management (BLM) and U.S. Department of Energy (DOE) working jointly as lead agencies published a *Draft Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States* (Solar PEIS [BLM and DOE 2010]). Public comments were accepted through May 2, 2011. More than 80,500 comments were received. The public, as well as many cooperating agencies and key stakeholders, offered suggestions on how the BLM and DOE could increase the utility of the document, strengthen elements of the proposed Solar Energy Program, and increase certainty regarding solar energy development on BLM-administered lands.

The lead agencies have made adjustments to the Solar PEIS to better meet the BLM and DOE's solar energy program objectives. The lead agencies have prepared this targeted Supplement to the Draft Solar PEIS (Supplement) that includes modified and new components of the BLM's proposed Solar Energy Program, DOE's proposed programmatic environmental guidance, and references to relevant portions of the Draft Solar PEIS. The Supplement also updates the environmental effects analysis associated with the BLM's modified action alternatives. Because of its programmatic nature, the Supplement analyzes environmental effects over a broad geographic and time horizon, focusing on major impacts in a qualitative manner (see Section 1.5).

The BLM and DOE have prepared this document in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended; the Council on Environmental Quality; the DOE and the U.S. Department of the Interior (DOI) regulations implementing NEPA; and the Federal Land Policy and Management Act (FLPMA) of 1976, as amended.

Through this Supplement, the BLM has modified its preferred alternative to emphasize its commitment to the concept of solar energy zones (SEZs). Efforts have been made to ensure that SEZs are not located in high conflict areas; a protocol for identifying new SEZs has been provided; and incentives for projects within SEZs have been outlined. In addition, the BLM has revisited ongoing state-based planning efforts to ensure that such efforts could result in the identification of new SEZs. While the BLM's preferred alternative emphasizes the use and creation of SEZs for utility-scale solar energy development, it also includes a proposed process that will accommodate responsible development outside of SEZs.

As described in DOE's proposed action in the Draft Solar PEIS, DOE would develop and adopt programmatic environmental guidance which would be used by DOE to further integrate environmental considerations into its analysis and selection of proposed solar projects. DOE has used the information about environmental impacts provided in the Draft Solar PEIS and other information to develop draft programmatic guidance. DOE has included the draft programmatic guidance in this Supplement for public comment.

1 Release of this Supplement allows the public an opportunity to evaluate the modified and  
2 new components of the proposed program and provide input that will assist the BLM and DOE  
3 in their decision-making process. On the basis of input received on the Draft Solar PEIS and this  
4 Supplement, the lead agencies will prepare a Final Solar PEIS and Record(s) of Decision (ROD).  
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## 7 **1.2 SUMMARY OF COMMENTS**

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9 There were several types of commentors on the Draft Solar PEIS representing a wide  
10 range of concerns: individual members of the public; federal, state, and local governmental  
11 agencies; Tribes; solar companies and solar industry organizations; environmental organizations;  
12 utilities; ranchers; water districts; and many other types of organizations.  
13

14 The following paragraphs present the most prevalent concerns conveyed in the comments  
15 on the Draft Solar PEIS. In instances where this Supplement addresses these concerns, cross  
16 references to the associated sections of this Supplement are provided.  
17

18 The largest number of comments on the Draft Solar PEIS came from members of  
19 environmental organizations (e.g., Defenders of Wildlife, National Resources Defense  
20 Council, Sierra Club, The Wilderness Society, and the Wildlife Federation Action Club).  
21 These environmental organizations and many individual commentors stated opposition to  
22 BLM's preferred solar energy development program alternative (referred to as the "program  
23 alternative") and favored a modified solar energy zone program alternative ("SEZ alternative"),  
24 under which several of the proposed SEZs would be dropped and the boundaries of others would  
25 be revised. Cooperating agencies, as well as state and local governments, also recommended  
26 deleting some proposed SEZs, reducing the size of some SEZs, restricting the type of  
27 development within some SEZs, and removing some of the lands from the program alternative.  
28 See Sections 2.2 and 2.3 of this Supplement for a discussion of the BLM's proposed modified  
29 action alternatives and its preferred alternative, and Appendices B and C for discussions of  
30 proposed changes to individual SEZs.  
31

32 A broad range of commentors (industry, agencies, and environmental organizations)  
33 noted the need for an explicit process for identifying new SEZs to meet the projected future level  
34 of solar development. The BLM was urged to develop such a process as a part of the Final Solar  
35 PEIS. See Section 2.2.2.2.5 and Appendix D of this Supplement for discussion of a proposed  
36 new SEZ identification protocol. Some states have already initiated efforts to identify new SEZs,  
37 including the Restoration Design Energy Project (RDEP) in Arizona and the Desert Renewable  
38 Energy Conservation Plan (DRECP) in California. See Section 2.2.2.2.6 of this Supplement for  
39 discussion of ongoing state-level efforts to identify new SEZs.  
40

41 In characterizing their concerns with the program alternative, some environmental  
42 organizations and agencies identified categories of land that they believe should have been  
43 excluded from application for development, for example, citizen-nominated wilderness, lands  
44 identified in proposed protective legislation, core habitat, wildlife migration corridors, and areas  
45 around National Parks. See Section 2.2.2.1 of this Supplement for information on proposed  
46 changes to exclusion areas.

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2 Many written comments and individual speakers at the public meetings stated a  
3 preference for distributed generation and community-based energy solutions over utility-scale  
4 projects on public lands that would require long-distance transmission, adversely affect local  
5 communities and quality of life, and potentially result in higher future electricity costs for  
6 consumers. Concerns were expressed regarding conversion of public lands to a single, industrial-  
7 type use that would preclude other uses by the public. These concerns are not further addressed  
8 through this Supplement, but the Draft Solar PEIS did address these issues in Section 2.5.1 and  
9 Sections 2.5.4 through 2.5.8.

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11 The primary concern expressed by the solar industry related to the BLM’s commitment to  
12 continued processing of existing applications. See Section 1.7 of this Supplement for information  
13 on how the BLM will process new and pending applications. Comments from the solar industry  
14 also did not support the SEZ alternative. They stated that while the proposed SEZs theoretically  
15 contain sufficient acreage to accommodate projected levels of development, the identified SEZs  
16 might not be located in the right places for meeting market demand or maximizing transmission  
17 opportunities. Identification of a variance process to address proposals for development on lands  
18 outside of SEZs was requested. Industry comments also expressed concern that the proposed  
19 mitigation requirements for SEZs were too onerous. See Section 2.2.2.2.3 of this Supplement  
20 for information on incentives being proposed to make development in SEZs more attractive to  
21 industry, including transmission-related activities, and Section 2.2.2.3 for discussion of the  
22 proposed variance process for applications outside of SEZs.

23  
24 Not all comments received are being addressed through this Supplement; for example,  
25 comments were received proposing specific changes to the adaptive management strategy and  
26 design features proposed in the Draft Solar PEIS. These comments will be addressed in the Final  
27 Solar PEIS, and any appropriate corresponding changes will be made to that document.

### 28 29 30 **1.3 BLM’S PURPOSE AND NEED**

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32 As described in the Draft Solar PEIS, the BLM has identified a need to respond in a more  
33 efficient and effective manner to the high interest in siting utility-scale solar energy development  
34 on public lands and to ensure consistent application of measures to mitigate the adverse impacts  
35 of such development. The BLM is therefore considering replacing certain elements of its existing  
36 solar energy policies with a comprehensive Solar Energy Program that would allow the  
37 permitting of future solar energy development projects to proceed in a more efficient and  
38 standardized manner. While the proposed Solar Energy Program will further the BLM’s ability  
39 to meet the mandates of Executive Order (E.O.) 13212 (“Actions to Expedite Energy-Related  
40 Projects,” *Federal Register*, Volume 66, page 28357, May 22, 2001) and the Energy Policy Act  
41 of 2005, it also has been designed to meet the requirements of Secretarial Order 3285A1  
42 (Secretary of the Interior 2010) related to identifying and prioritizing specific locations best  
43 suited for utility-scale solar energy development on public lands.

44  
45 In order to delineate areas best suited for utility-scale solar energy development, through  
46 the Draft Solar PEIS the BLM identified and analyzed proposed SEZs to determine their

1 suitability for solar energy development. Based on further data collection, consultation with land  
2 and resource managers, and comment analysis, the BLM has eliminated some proposed SEZs  
3 from further analysis and refined the boundaries of other SEZs. These changes are reflected in  
4 this Supplement and will be carried forward into the Final Solar PEIS. See Section 2.2.2.2 for  
5 additional information about proposed changes to SEZs.  
6

7 The objectives of BLM's proposed Solar Energy Program remain unchanged and include  
8 the following:  
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- 10 • Facilitating near-term utility-scale solar energy development on public lands;
- 11
- 12 • Minimizing potential negative environmental, social, and economic impacts;
- 13
- 14 • Providing flexibility to consider a variety of solar energy projects (location,  
15 facility size, technology, and so forth);
- 16
- 17 • Optimizing existing transmission infrastructure and corridors; and
- 18
- 19 • Standardizing and streamlining the authorization process for utility-scale solar  
20 energy development on BLM-administered lands.  
21

22 The elements of the BLM's proposed Solar Energy Program have been expanded from  
23 the Draft Solar PEIS and include the following:  
24

- 25 1. Continued processing of pending applications for utility-scale solar energy  
26 development;
- 27
- 28 2. Identification of lands to be excluded from utility-scale solar energy  
29 development in the six-state study area;
- 30
- 31 3. Identification of priority areas (i.e., SEZs) that are well suited for utility-scale  
32 production of solar energy in accordance with the requirements of Secretarial  
33 Order 3285A1 and the associated authorization procedures for applications in  
34 these areas;
- 35
- 36 4. Establishment of a process to identify new SEZs;
- 37
- 38 5. Establishment of a process that allows for responsible utility-scale solar  
39 energy development outside of SEZs (i.e., variance process);  
40
- 41 6. Establishment of mitigation requirements for solar energy development on  
42 public lands to ensure the most environmentally responsible development and  
43 delivery of solar energy; and  
44
- 45 7. Amendment of BLM land use plans in the six-state study area to adopt those  
46 elements of the new Solar Energy Program that pertain to planning.

1 **1.4 BLM DECISIONS TO BE MADE**  
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3 On the basis of the analyses presented in the Solar PEIS, the BLM anticipates making the  
4 following land use planning decisions that will establish the foundation for a comprehensive  
5 Solar Energy Program. Changes in these land use planning decisions in the future will require the  
6 BLM to complete land use plan amendments and associated NEPA analyses.  
7

- 8 1. Land use plan amendments that identify exclusion areas for utility-scale solar  
9 energy development in the six-state study area;  
10  
11 2. Land use plan amendments that identify areas potentially available for utility-  
12 scale solar energy development outside of SEZs in the six-state study area  
13 (i.e., variance areas<sup>1</sup>);  
14  
15 3. Land use plan amendments that identify priority areas for solar energy  
16 development that are well suited for utility-scale production of solar energy  
17 (i.e., SEZs); and  
18  
19 4. Land use plan amendments that establish design features (i.e., mitigation  
20 requirements) for solar energy development on public lands to ensure the most  
21 environmentally responsible development and delivery of solar energy (some  
22 may be SEZ-specific, as necessary).  
23

24 In addition to the planning-level decisions outlined above, the BLM’s Solar Energy  
25 Program will include a number of policy components such as the variance process to address  
26 right-of-way (ROW) applications for utility-scale solar energy development outside of SEZs and  
27 the incentives for projects proposed in SEZs. These components will be part of the ROD for the  
28 Solar PEIS; the BLM will issue subsequent Instruction Memoranda to formally establish such  
29 policies. The BLM retains the ability to change policies associated with its Solar Energy  
30 Program through existing policy-making tools.  
31

32 On the basis of the analysis in the Final Solar PEIS, the Secretary of the Interior may also  
33 decide to withdraw the public lands encompassed by SEZs from potentially conflicting uses  
34 through the issuance of a Public Land Order. The required withdrawal studies and analyses are  
35 being completed as part of the Solar PEIS (see Section 2.2.2.2.4 of this Supplement for an  
36 update). The Secretary of the Interior’s final decision on the withdrawal of these lands will be  
37 made on the basis of the Final Solar PEIS; however, the Secretary’s ROD for any withdrawal  
38 decision will likely be made separate from the BLM’s ROD for the land use planning decisions  
39 analyzed by the Solar PEIS.  
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<sup>1</sup> A variance area is an area to be avoided that may be available for a solar energy right-of-way (ROW) with special stipulations or considerations; see the *Land Use Planning Handbook* (BLM 2005).

1 While the Solar PEIS provides analysis of the impacts of constructing, operating, and  
2 decommissioning the infrastructure needed to support utility-scale solar energy development,  
3 such as roads, transmission lines, and natural gas or water pipelines, the decisions to be made  
4 will be applicable only to the siting of utility-scale solar energy generation facilities (Draft Solar  
5 PEIS, Section 2.2.2.2). Management decisions for supporting infrastructure would continue to be  
6 made in accordance with existing land use plan decisions and current applicable policy. Siting of  
7 supporting infrastructure would be analyzed in project-specific environmental reviews.  
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## 10 **1.5 SCOPE OF THE ANALYSIS**

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12 The scope of this Supplement remains unchanged from the Draft Solar PEIS—it includes  
13 analyses of the use of multiple solar energy technologies at utility scale over the next 20 years on  
14 lands within six southwestern states: Arizona, California, Colorado, Nevada, New Mexico, and  
15 Utah.  
16

17 The scope of this Supplement is limited to utility-scale solar development, in part,  
18 because the Energy Policy Act of 2005 and Secretarial Order 3285A1 (Secretary of the Interior  
19 2010) require that the BLM take steps to facilitate development at that scale. For the purposes of  
20 the Solar PEIS and associated decision making, utility-scale solar development is defined as any  
21 project capable of generating 20 megawatts (MW) or more. As a result, the BLM’s new Solar  
22 Energy Program would apply only to projects of this scale; decisions on projects that are less  
23 than 20 MW would continue to be made in accordance with existing land use plan decisions,  
24 current applicable policy, and individual site-specific NEPA analyses.  
25

26 Several technologies for the utility-scale capture of solar energy are currently in use and  
27 are being refined. Viable utility-scale solar technologies considered likely to be deployed over  
28 the next 20 years and analyzed as part of the Solar PEIS include parabolic trough, power tower,  
29 dish engine systems, and photovoltaic (PV) systems.  
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### 32 **1.5.1 Program Analysis versus SEZ-Specific Analysis**

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34 NEPA dictates that federal agencies take a “hard look” at the environmental  
35 consequences of a proposed action. The requisite environmental analysis performed by an  
36 agency must be commensurate with the action in question. In the case of the Solar PEIS, it is  
37 important to make a distinction between the Solar Energy Program elements to be decided upon  
38 based on the Solar PEIS, and the additional data collection and analysis being completed for  
39 SEZs to inform future project decisions in those priority areas.  
40

41 As outlined in Section 1.4 above, the BLM expects to make withdrawal- and planning-  
42 level decisions through the Solar PEIS, such as land use designations and design features. The  
43 program elements adopted via planning-level decisions will provide the basis for future project-  
44 specific utility-scale solar energy development decisions. The Solar PEIS appropriately evaluates  
45 the potential direct, indirect, and cumulative environmental, social, and economic effects of  
46 establishing broad Solar Energy Program elements and strategies across the six-state study area.

1 Because the proposed program involves environmental effects over a broad geographic and time  
2 horizon, the depth and detail of the impact analysis are fairly general, focusing on major impacts  
3 in a qualitative manner.  
4

5 In addition to the programmatic analysis described above, the Solar PEIS also provides  
6 in-depth data collection and environmental analysis for proposed SEZs. The primary purpose of  
7 this more rigorous analysis is to provide documentation from which the BLM can tier future  
8 project authorizations, thereby limiting the required scope and effort of project-specific NEPA  
9 analyses. The BLM will complete a site-specific environmental review of all solar energy  
10 ROW applications in accordance with NEPA prior to issuing a ROW authorization. All future  
11 projects proposed in SEZs will tier to the analysis in the Solar PEIS. The extent of this tiering,  
12 however, will vary from project to project, as will the necessary level of NEPA documentation  
13 (see Section 2.2.2.2.2 on the SEZ authorization process).  
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## 16 **1.6 STATUS OF REASONABLY FORESEEABLE DEVELOPMENT SCENARIO**

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18 The reasonably foreseeable development scenario (RFDS) developed for the Draft Solar  
19 PEIS to help define the potential magnitude of solar energy development that could occur within  
20 the six-state study area over the next 20 years is still considered to be valid to support analyses in  
21 this Supplement and the Final Solar PEIS.  
22

23 As discussed in the Draft Solar PEIS (Section 2.4), the RFDS was calculated on the basis  
24 of the requirements for electricity generation from renewable energy resources established in the  
25 Renewable Portfolio Standards (RPSs) in each of the six states. To establish an upper bound, it  
26 was assumed that 50% of the RPS-based requirement for renewable energy production would be  
27 provided from solar energy and that 75% of the solar development would occur on BLM-  
28 administered lands within the specific state.  
29

30 Table 1.6-1 presents the RFDS for each state in terms of projected MWs and estimated  
31 acres of land required to support that level of development. As shown, the estimated amount of  
32 solar energy generation on BLM-administered lands in the study area over the 20-year study  
33 period is about 24,000 MW, with a corresponding dedicated use of about 214,000 acres  
34 (866 km<sup>2</sup>) of BLM-administered lands.  
35

36 A number of comments on the Draft Solar PEIS pointed out that the RFDS calculations  
37 do not account for the import and export of solar-generated electricity between states and, as a  
38 result, the calculations could underestimate potential development in a given state. Specifically,  
39 it was pointed out that renewable energy generated in Arizona, Nevada, and even Utah might be  
40 exported to California as utilities try to meet the RPS established in that state. In such cases, the  
41 total level of development in these states would be greater than that projected by the RFDS.  
42 While these are valid considerations, the conditions assumed in the RFDS (i.e., that 50% of the  
43 renewable energy development would be from solar and that 75% of it would occur on BLM-  
44 administered lands) provide an upper bound on the potential solar development both within a  
45 state and on BLM-administered lands that might accommodate additional development for  
46 exported electricity.  
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**TABLE 1.6-1 Projected Megawatts of Solar Power Development by 2030 and Corresponding Developed Acreage Estimates for Reasonably Foreseeable Development Scenario<sup>a</sup>**

State	Landholding	Estimated MWs under RFDS	Estimated Acres under RFDS <sup>b</sup>
Arizona	BLM	2,424	21,816
	Non-BLM	808	7,272
California	BLM	15,421	138,789
	Non-BLM	5,140	46,260
Colorado	BLM	2,194	19,746
	Non-BLM	731	6,579
Nevada	BLM	1,701	15,309
	Non-BLM	567	5,103
New Mexico	BLM	833	7,497
	Non-BLM	278	2,502
Utah	BLM	1,219	10,971
	Non-BLM	406	3,654
Total	BLM	23,791	214,119
	Non-BLM	7,930	71,370

<sup>a</sup> See Appendix E of the Draft Solar PEIS for details on the methodologies used to calculate the RFDS.

<sup>b</sup> Acreage calculated assuming land use of 9 acres/MW. To convert acres to km<sup>2</sup>, multiply by 0.004047.

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Table 2.3-1 in this Supplement compares the amount of land needed to support the RFDS projects to the amount of land that would be made available for solar development in each state under the BLM's modified action alternatives. Because the SEZs proposed under the modified alternatives may not make enough land available to meet the RFDS requirements in some states (e.g., Arizona, California, and Colorado), the BLM has initiated efforts to identify new SEZs through ongoing state-based efforts (see Section 2.2.2.2.6 of this Supplement for more information). The BLM also anticipates that it will identify additional SEZs in other states in the near future using the protocol for identifying new SEZs presented in Appendix D of this Supplement. There is also the opportunity to develop projects outside of SEZs in variance areas in accordance with the variance process described in this Supplement (see Section 2.2.2.3.1).



1 **1.7 DEFINITION AND PROCESSING APPROACH FOR NEW, PENDING, AND**  
 2 **APPROVED SOLAR APPLICATIONS**

3  
 4 Many individuals and organizations commenting on the Draft Solar PEIS wanted to know  
 5 more about how the BLM intends to deal with solar applications filed before the Solar PEIS  
 6 ROD. This section responds to those concerns by describing how the BLM will process  
 7 individual applications. The BLM intends to continue to process all pending applications that  
 8 meet due diligence and siting requirements under BLM’s current policies. All new applications  
 9 will be subject to the ROD for the Solar PEIS. The approach that the BLM will use for  
 10 processing new and pending applications is summarized in Table 1.7-1.  
 11

12  
 13 **1.7.1 New Applications**

14  
 15 The BLM will define “new” applications as those applications filed within proposed  
 16 SEZs<sup>2</sup> after June 30, 2009, and any application filed after the publication of this Supplement to  
 17 the Draft Solar PEIS. The BLM will continue to accept applications both inside and outside of  
 18 proposed SEZs after publication of this Supplement. All new applications will be subject to the  
 19 decisions in the ROD and associated land use plan amendments, including a competitive process  
 20 for projects in SEZs (see Section 2.2.2.2.1) and the variance process for projects proposed in  
 21 variance areas (see Section 2.2.2.3).  
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24 **TABLE 1.7-1 Processing Approach for New and Pending Applications**

Application Location	Filing Date	Type	Processing Approach
Inside proposed SEZs	Before June 30, 2009	Pending	Continued processing under existing policies
	After June 30, 2009	New	Subject to Solar PEIS ROD including competitive process
Outside proposed SEZs	Before publication of Supplement	Pending	Continued processing under existing policies
	After publication of Supplement	New	Subject to Solar PEIS ROD including variance process

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## 1 1.7.2 Pending Applications

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3 The BLM will define “pending” applications as all applications on file with the BLM  
4 before publication of this Supplement, including applications for lands within proposed SEZs  
5 filed before June 30, 2009.  
6

7 In an effort to facilitate environmentally responsible solar energy development, the BLM  
8 will continue to process appropriately sited projects that have been put forward by qualified,  
9 diligent applicants. The BLM will process pending solar applications consistent with its existing  
10 regulations and policies (e.g., IM 2011-060 [BLM 2011a] and IM 2011-061 [BLM 2011b]), and  
11 with current interagency coordination practices with DOI agencies, such as the U.S. Fish and  
12 Wildlife Service (USFWS) and National Park Service (NPS). These applications will be treated  
13 as project-specific undertakings under Section 106 of the National Historical Preservation Act  
14 (NHPA) and the BLM’s National Programmatic Agreement (PA).  
15

16 The BLM has determined that, in appropriate circumstances, it can rely on the broad  
17 discretion it has under FLPMA to deny ROW applications prior to completing the NEPA process  
18 if such applications do not meet due diligence requirements and/or environmental criteria. Such  
19 decisions must be made with regard for the public interest and be supported by reasoned analysis  
20 and an adequate administrative record. Decisions to deny pending applications must be assessed  
21 on a case-by-case basis. BLM’s denial of an application constitutes a “final agency action” and is  
22 therefore subject to administrative appeal to the Interior Board of Land Appeals (IBLA).  
23

24 The BLM may decide to deny pending solar applications before completion of the Solar  
25 PEIS ROD if the BLM has a supportable, rational basis. The following guidelines will be used to  
26 inform the BLM’s processing of pending applications:  
27

- 28 • Pending applications on the DOI’s “high priority” list shall continue to be  
29 given priority processing as long as the applicant continues to meet the due  
30 diligence provisions in IM 2011-060 (BLM 2011a).  
31
- 32 • Pending applications that meet the criteria for “High Potential for Conflict”  
33 described in IM 2011-061 (BLM 2011b) are likely candidates for denial. High  
34 Potential for Conflict describes more complex projects that will require a  
35 greater level of consultation, analysis, and mitigation to resolve issues or that  
36 may not be feasible to authorize, including:
  - 37 – Lands near or adjacent to lands designated by Congress, the President, or  
38 the Secretary for the protection of sensitive viewsheds, resources, and  
39 values (e.g., units of the National Park System, Fish and Wildlife Service  
40 Refuge System, specially designated units of the National Forest System,  
41 and the BLM National Landscape Conservation System<sup>3</sup>), which may be  
42 adversely affected by development;

---

<sup>3</sup> National Historic and Scenic Trails are part of the BLM National Landscape Conservation System but, due to their linear nature, were described in IM 2011-061 as areas of “Medium Potential for Conflict.”

- 1           – Lands adjacent to Wild, Scenic, and Recreational Rivers and river  
2           segments determined eligible or suitable for Wild or Scenic River status,  
3           if project development may have significant adverse effects on sensitive  
4           viewsheds, resources, and values;  
5           – Designated critical habitat for federally threatened and endangered species  
6           if project development is likely to result in the destruction or adverse  
7           modification of that critical habitat;  
8           – Lands currently designated as Visual Resource Management (VRM)  
9           Class I or Class II in BLM land use plans;  
10          – ROW exclusion areas identified in BLM land use plans; and  
11          – Lands currently designated as no surface occupancy in BLM land use  
12          plans.  
13  
14          • Pending applications on lands proposed as exclusion areas for utility-scale  
15          solar energy development in the Final Solar PEIS are likely candidates for  
16          denial. Upon issuance of the Solar PEIS ROD, the BLM may deny pending  
17          applications to the extent such applications overlap with exclusion areas  
18          identified in the ROD for the protection of ecological, cultural, visual, or other  
19          specified resource values.  
20  
21          • Pending applications shall be processed in accordance with the due diligence  
22          provisions in IM 2011-060:  
23          – Applications shall be denied if the applicant cannot demonstrate financial  
24          and technical capability, for example,  
25                  ▪ International or domestic experience with solar projects on federal or  
26                  nonfederal lands;  
27                  ▪ Sufficient capitalization to carry out development;  
28                  ▪ Conditional commitments of DOE loan guarantees;  
29                  ▪ Confirmed Power Purchase Agreements (PPAs);  
30                  ▪ Engineering, procurement and construction contracts; and  
31                  ▪ Supply contracts with credible third-party vendors for the manufacture  
32                  and/or supply of key components for solar project facilities.  
33          – Applications shall be denied if the applicant cannot meet Plan of  
34          Development (POD) due diligence requirements:  
35                  ▪ The POD must be of sufficient detail to provide the basic information  
36                  necessary to begin the environmental analysis and review process; and  
37                  ▪ Time lines established in IM 2011-060 will apply.  
38  
39          • Pending applications that meet due diligence requirements and have medium  
40          or low resource conflicts will be evaluated by the BLM in coordination with  
41          other DOI agencies. These evaluations will assist the BLM in identifying  
42          issues and developing appropriate strategies to resolve such issues  
43          (e.g., alternatives, mitigation, and so forth) and will occur before the BLM  
44          initiates the NEPA process.  
45

1 The BLM, in coordination with other DOI agencies, will continue to identify priority  
2 projects. The BLM will apply the due diligence and screening criteria requirements of  
3 IM 2011-060 and IM 2011-061 to determine priority projects. Designation as a “priority project”  
4 means that the BLM and applicable partner agencies have agreed to prioritize processing and  
5 review of the application. Priority projects are subject to all regulatory and statutory  
6 requirements, including full NEPA review.  
7

8 The efforts described above are expected to result in additional approvals and denials  
9 over the next several months.  
10

11 As of August 15, 2011, there were 79 pending first-in-line solar applications: 31 in  
12 Arizona, 20 in California, 25 in Nevada, and 3 in New Mexico. A detailed list is included in  
13 Appendix A of this Supplement.  
14

### 15 16 **1.7.3 Approved Applications** 17

18 The ROD for the Solar PEIS will recognize all previously approved solar projects. As of  
19 August 15, 2011, the BLM had approved 10 utility-scale solar projects on public land and the  
20 associated linear ROWs to enable the development of 2 projects on private land. Each approval  
21 was based on a site-specific EIS and announced through a *Federal Register* Notice and press  
22 release accompanied by a project fact sheet and map. These documents are available at  
23 [http://www.blm.gov/wo/st/en/prog/energy/renewable\\_energy/priority\\_projects.html](http://www.blm.gov/wo/st/en/prog/energy/renewable_energy/priority_projects.html). A summary  
24 of the approved public land applications is provided in Table 1.7-2. Three of the approved public  
25 land projects in California will require additional case processing and environmental review to  
26 consider post-authorization requests to change technology.  
27

28 Seven of the approved public land projects are located in the California Desert District  
29 planning boundary of the California Desert Conservation Area (CDCA) Plan, the applicable  
30 Resource Management Plan (RMP) for these project sites and the surrounding areas. The CDCA  
31 Plan requires that all sites associated with power generation or transmission not already  
32 identified in that Plan be considered through the BLM’s land use plan amendment process. As a  
33 result, prior to approval of these seven projects, the BLM had to specifically amend the CDCA  
34 Plan to allow each solar project. The approved amendments revise the plan to allow for utility-  
35 scale solar energy development on the specified tracts of land. The BLM intends to again amend  
36 the CDCA Plan in the ROD for the Solar PEIS to designate SEZs as additional areas appropriate  
37 for solar energy generation and related transmission. This will help streamline future project  
38 approvals in SEZs in the CDCA planning area. Projects within the CDCA planning area that are  
39 subject to the variance process (see Section 2.2.2.3) would still require a plan amendment until  
40 further amended by a subsequent planning process (e.g., the DRECP; see Section 2.2.2.2.6).  
41  
42  
43

1 **TABLE 1.7-2 Approved Solar Projects on BLM-Administered Lands as of August 15, 2011**

Serial Number	Customer Name (Project Name)	Application Filed	Total BLM Acres <sup>a</sup>	MW	Technology	BLM Field Office
CACA 048649	FIRST SOLAR (Desert Sunlight)	November 7, 2006	4,100	550	PV	Palm Springs– South Coast
CACA 047740	TESSERA SOLAR (Imperial Valley Solar) <sup>b</sup>	January 6, 2005	6,459	709	Dish engine	El Centro
CACA 048668	BRIGHT SOURCE (Ivanpah SEGS) <sup>c</sup>	November 17, 2006	3,501	370	Concentrating solar power (CSP)/tower	Needles
CACA 048811	SOLAR MILLENNIUM/ CHEVRON (Blythe) <sup>d</sup>	February 15, 2007	7,025	1,000	CSP/trough	Palm Springs– South Coast
CACA 048880	NextEra BOULEVARD ASSOCIATES LLC (Genesis)	January 31, 2007	1,950	250	CSP/trough	Palm Springs– South Coast
CACA 049537	TESSERA SOLAR (Calico Solar) <sup>e</sup>	March 14, 2007	4,604	664	Dish engine	Barstow
CACA 049561	CHEVRON ENERGY SOLUTIONS CO (Lucerne Valley)	December 7, 2007	422	45	PV	Barstow
NVN 084359	SOLAR MILLENNIUM (Amargosa Farm Road)	November 11, 2007	4,350	484	CSP/trough	Pahrump
NVN 085077	FIRST SOLAR (Silver State North)	March 21, 2008	618	50	PV	Las Vegas
NVN 086292	SOLAR RESERVE (Crescent Dunes)	November 5, 2008	2,250	110	CSP/tower	Tonopah
<b>Total</b>	10 projects		35,279	4,232		

<sup>a</sup> To convert acres to km<sup>2</sup>, multiply by 0.004047.

<sup>b</sup> Acquired by AES Solar; proposed technology change to PV.

<sup>c</sup> Includes CACA 049502, 049503, and 049504.

<sup>d</sup> Proposed technology change for first phase to PV.

<sup>e</sup> Acquired by K Road Solar; proposed technology change to partial PV.

1 **1.8 ONGOING RULEMAKING**

2  
3  
4 **1.8.1 Segregation Rule**

5  
6 On April 26, 2011, the BLM published an Interim Temporary Final Rulemaking (ITFR)  
7 and a Proposed Rule containing the same language as in the *Federal Register*. The rule is found  
8 in added Sections 2091.3-1(e) and 2804.25(e) in Title 43 of the *Code of Federal Regulations*  
9 (43 CFR 2091.3-1(e) and 2804.25(e)), which comprise regulations for segregations in general  
10 and ROW protection through segregations, respectively. The new segregation rule is intended to  
11 promote the orderly administration of public lands. The ITFR allows an authorized officer to  
12 close (segregate) public lands from operation of the public land laws. This includes the mining  
13 law, but not the mineral leasing or materials sale acts, for a period of up to two years. This  
14 segregation may not be extended under the ITFR. By protection of such lands, a solar or wind  
15 energy ROW applicant has assurances that the application will not be subject to adverse  
16 activities caused by either the filing of mining claims or impacts from other proposed land uses.  
17 The BLM is currently analyzing comments received as part of the final rulemaking process.  
18

19  
20 **1.8.2 Competitive Process**

21  
22 As part of this Supplement, the BLM is confirming its intentions to offer lands in SEZs  
23 through a competitive process. Comments received on the Draft Solar PEIS expressed concern  
24 over how the BLM would implement a new competitive process, and commentors specifically  
25 requested that the BLM develop regulations to define a competitive process that would provide  
26 opportunity for public comment and input. In response, the BLM has decided to undertake  
27 rulemaking to establish a competitive process for offering public lands for solar as well as wind  
28 energy development. When established, the rule would supersede some of the authorization  
29 policies identified in this Supplement (see Section 2.2.1.1).  
30

31 Rulemaking will involve publication of an Advanced Notice of Proposed Rulemaking,  
32 a Proposed Rule, and a Final Rule and could take up to two years to complete. The BLM is  
33 planning to publish an Advanced Notice of Proposed Rulemaking in October 2011 to accompany  
34 the release of this Supplement; the BLM intends to have a Proposed Rule available for public  
35 comment prior to the release of the Solar PEIS ROD (targeting late spring 2012).  
36

37 Section 501 of FLPMA authorizes the Secretary of the Interior, with respect to public  
38 lands, to grant, issue, or renew ROWs over, upon, under, or through such lands for systems  
39 for the generation, transmission, and distribution of electric energy (*United States Code*,  
40 Title 43, Section 1761(4) [43 USC 1761(4)]). This authority includes the issuance of ROW  
41 lease authorizations for solar energy generation systems. The existing ROW regulations  
42 (43 CFR 2804.23(c)) currently provide authority for identifying public lands under competitive  
43 bidding procedures, but limit the competitive process to responding to ROW applications. The  
44 BLM may use competitive procedures under existing regulations to screen or select applications  
45 for lands outside SEZs, where appropriate. The purpose of a competitive process under existing  
46 regulations is to determine which application would be processed. Through rulemaking, the

1 BLM could provide broader authority and a different competitive process for making lands  
2 available for solar energy development within SEZs.

3  
4 The proposed rule could include the following provisions for a competitive process for  
5 lands within SEZs:

- 6  
7 • **Call for nominations.** A call for nominations could be published in the  
8 *Federal Register* to solicit expressions of interest for parcels of land within  
9 individual SEZs. A nomination of a specific parcel would require payment of  
10 a nomination fee to be determined by the regulations. (Section 504 of FLPMA  
11 provides authority to the BLM to establish reasonable filing fees.)  
12
- 13 • **Review of nominations.** The BLM would review the nominations to  
14 determine parcels of land to offer in individual SEZs. The BLM would  
15 complete the work necessary to prepare the selected parcels for the  
16 competitive offer.  
17
- 18 • **Notice of competitive offer.** A Notice would be published at least 30 days  
19 prior to the competitive offer. The Notice would include a legal description of  
20 the lands involved, the process for conducting the competitive offer, a  
21 minimum bid requirement, and the due diligence requirements for the  
22 successful bidder to submit a POD for the lands involved in the competitive  
23 offer.  
24
- 25 • **Bonus bid competitive process or other competitive procedures.** A variety  
26 of competitive bid procedures could be defined by the new regulations. These  
27 other competitive procedures could include sealed bids, oral auctions or  
28 continuous bidding, two-stage bidding, or multiple factor bidding methods.  
29 Bonus bids would be handled as Treasury receipts. The accepted bonus bid  
30 would be nonrefundable.  
31
- 32 • **Issuance of competitive ROW lease authorization.** A ROW lease  
33 authorization (lease) could be issued to the successful bidder. The lease would  
34 be a 30-year, fixed-term lease with a fixed rental fee. The holder of the lease  
35 would be required to submit a POD and cost-recovery fees within the time  
36 frames specified in the lease.  
37
- 38 • **Administration of competitive ROW leases.** The leaseholder would submit  
39 a POD for authorization prior to the start of any construction. A NEPA review  
40 would be required prior to approval of the POD. The BLM would include a  
41 requirement in each competitive solar ROW lease that the holder begin  
42 construction within the time frames approved in the POD and comply with  
43 terms and conditions requiring the holder to maintain all facilities in  
44 accordance with the design standards in the approved POD. The BLM would  
45 require that a minimum performance bond be provided for all competitive  
46 solar ROW leases to ensure compliance with the provisions of the regulations  
47 and the terms and conditions of the lease.

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