

WELCOME

PUBLIC MEETING ON THE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (PEIS) FOR SOLAR ENERGY DEVELOPMENT IN SIX SOUTHWESTERN STATES

Hosted by: Bureau of Land Management (BLM), DOI
Energy Efficiency and Renewable Energy (EERE) Office, DOE

Brief overview presentation begins at 7 PM, followed by public comments

Please sign up if you wish to present oral comments



Programmatic EIS for Solar Energy Development in Six Southwestern States

- Co-Lead Agencies: BLM and DOE
- Includes: Arizona, California, Colorado, Nevada, New Mexico, and Utah
- Technologies Assessed: Parabolic Trough, Power Tower, Dish Engine, Photovoltaic
- Evaluates the impacts of utility-scale solar energy development; focuses on assessing potential priority development areas (24 solar energy zones or SEZs)
- Includes standard set of mitigation requirements for projects on public lands



150 MW Parabolic Trough Plant
Kramer Junction, CA



5 MW Power Tower Plant Lancaster, CA



Stirling Dish Engine Test Facility, Sandia Natl. Lab, NM



PV Plant Prescott, AZ

History of the Solar PEIS project

- Eleven scoping meetings held June and July 2008
- Due to the addition of 24 proposed SEZs, second scoping period June 30–Sept 14, 2009
- Comments received during both scoping periods have been considered in preparation of the Draft Solar PEIS

Proposed SEZs –
3 in Arizona, 4 in California, 4 in Colorado,
7 in Nevada, 3 in New Mexico, 3 in Utah

Cooperating Agencies for the Solar PEIS

- U.S. Army Corp of Engineers - South Pacific Division
- U.S. Bureau of Reclamation
- U.S. Department of Defense
- U.S. Environmental Protection Agency – Region 9
- U.S. Fish and Wildlife Service
- U.S. National Park Service
- State of Arizona Game and Fish Dept
- State of California, California Energy Commission
- State of California Public Utilities Commission
- State of Nevada Dept of Wildlife
- N-4 Grazing Board, Nevada
- State of Utah Public Lands Policy Coordination Office
- Clark County Nevada
- Dona Ana County New Mexico
- Esmeralda County Nevada
- Eureka County Nevada
- Lincoln County Nevada
- Nye County Nevada
- Saguache County Colorado



Public Meetings and PEIS Schedule

- Purpose
 - to give a brief summary of Solar Programmatic effort
 - to listen to and record public comments
- The Draft Solar PEIS was released December 17, 2010
- 14 public meetings are to be held in February and March
- Completion of the Solar PEIS anticipated Fall 2011



BLM Solar PEIS Alternatives

- BLM's two action alternatives would establish a new Solar Energy Program of right-of-way exclusion areas, policies and required design features:
 - the **Solar Energy Development Program Alternative**: 22 million acres of land available for application, prioritizes development in SEZs (total of about 677,400 acres)
 - the **Solar Energy Zone Program Alternative**: only lands within the SEZs available for application
- The **No Action Alternative** continues use of existing solar energy policies in conformance with applicable land use plans. Solar energy ROW applications could be considered on about 99 million acres of BLM-administered lands (where such use is not specifically prohibited).



DOE Solar PEIS Alternatives

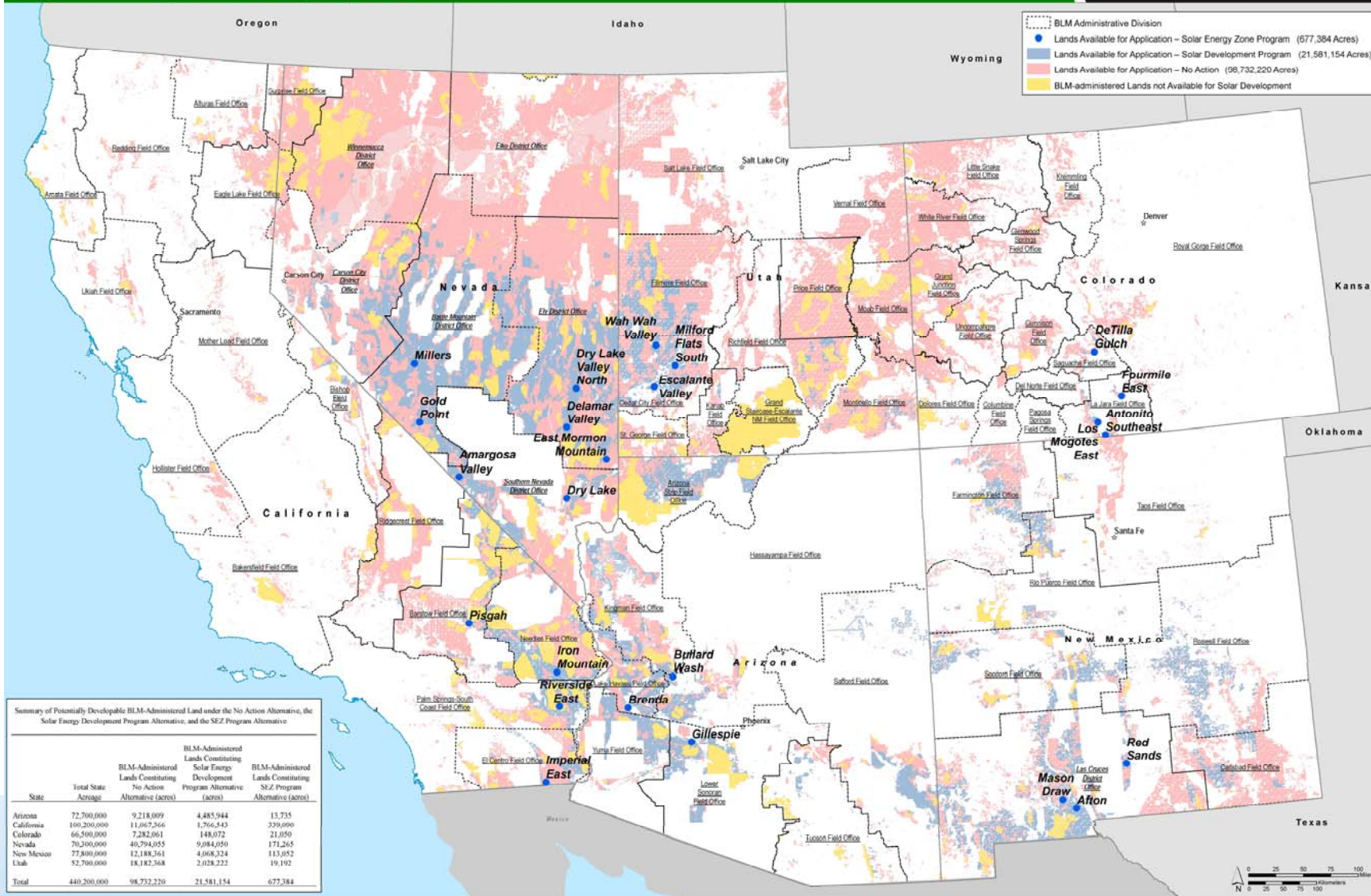
- DOE's **Action Alternative** would develop programmatic guidance to further integrate environmental considerations into the analysis and selection of solar projects that DOE will support
- Under the **No Action Alternative**, DOE would continue to conduct environmental reviews of DOE-funded solar projects on a case-by-case basis



BLM-Administered Lands in the Six-State Study Area Available for Solar Energy ROW Application Under the BLM Alternatives Considered in the Solar PEIS

Map Prepared December 2010

Property of the U.S. Departments of Energy and the Interior for use in preparation of their Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States



BLM Administrative Division

- Lands Available for Application – Solar Energy Zone Program (677,384 Acres)
- Lands Available for Application – Solar Development Program (21,581,154 Acres)
- Lands Available for Application – No Action (98,732,220 Acres)
- BLM-administered Lands not Available for Solar Development

Summary of Potentially Developable BLM-Administered Land under the No Action Alternative, the Solar Energy Development Program Alternative, and the SEZ Program Alternative

State	Total State Acreage	BLM-Administered Lands Constituting No Action Alternative (acres)	BLM-Administered Lands Constituting Solar Energy Development Program Alternative (acres)	BLM-Administered Lands Constituting SEZ Program Alternative (acres)
Arizona	72,700,000	9,218,009	4,485,944	13,735
California	100,200,000	11,067,366	1,766,543	339,090
Colorado	66,500,000	7,282,061	148,072	21,050
Nevada	70,300,000	40,794,055	9,084,050	171,265
New Mexico	77,800,000	12,188,361	4,068,324	113,052
Utah	52,700,000	18,182,368	2,028,222	19,192
Total	440,200,000	98,732,220	21,581,154	677,384



Reasonably Foreseeable Development Scenario (RFDS)

Needed to project the amount of solar development and overall impacts.

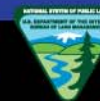
- Estimates the amount of power projected to be generated through solar energy development in the 6-state study area through the year 2030
 - for BLM-administered lands, RFDS is estimated as about 24,000 MW on 214,000 acres
 - for all lands in the 6-state study area, RFDS is estimated as about 32,000 MW on 285,000 acres
 - the RFDS is applicable to all alternatives

These estimates were derived from power needs associated with each state's Renewable Portfolio Standard (RPS) and certain assumptions.

Elements of BLM's Proposed Solar Energy Program

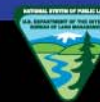
- Identifies many categories of **lands excluded** from solar development, such as:
 - lands with lower quality solar resources and higher slopes
 - critical habitat for listed species under the Endangered Species Act
 - wilderness and other specially-designated areasAfter exclusions, about **22 million acres of BLM-administered lands** would be open for application
- Identifies **priority areas** within lands open to development called solar energy zones or SEZs. Proposed SEZs were identified based on criteria including:
 - proximity to roads and transmission lines or designated corridors
 - generally, size of 2,500 acres (8.1 km²) or greater
 - existing land use plans, local conditions, and institutional knowledge

About 677,400 acres of BLM-administered lands are included in proposed SEZs



Elements of BLM's Proposed Solar Energy Program

- Establishes **policies** for utility-scale solar energy development on public lands: administration policies /authorization policies
- Establishes **mitigation requirements** (called “design features” in this PEIS) to ensure the most environmentally responsible development and delivery of solar energy. The design features include:
 - Requirements for mitigation of impacts across a broad range of resources
 - Requirements for project-specific mitigation plans
- **Amendment of land use plans** to incorporate Solar Energy Program elements
 - To identify lands excluded from development and lands where development will be prioritized
 - To adopt policies and design features required for solar energy development on BLM-administered lands



Structure and Content of PEIS:

- Chapter 1: Introduction (Purpose and Need; Scope)
- Chapter 2: Description of Alternatives and RFDS
- Chapter 3: Overview of Solar Energy Production Technologies and Agency Processes
- Chapter 4: Affected Environment for 6-State Study Area
- Chapter 5: Impacts and Potential Mitigation Measures*
- Chapter 6: Analysis of BLM's Alternatives
- Chapter 7: Analysis of DOE's Alternatives
- Chapters 8-13: Affected Environment and Impact Assessment for Proposed SEZs:
 - Ch 8: Arizona
 - Ch 9: California
 - Ch 10: Colorado
 - Ch 11: Nevada
 - Ch 12: New Mexico
 - Ch 13: Utah
- Chapter 14: Consultation and Coordination
- Chapter 15: List of Preparers
- Chapter 16: Glossary

Appendices

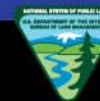
- A – Current and Proposed BLM Policies, Design Features, and SEZ-Specific Mitigation Measures*
- B – Active Solar Applications for BLM-administered Lands
- C – BLM Land Use Plan Amendments
- D – Other Regional and State Plans
- E – Methods for Estimating RFDS
- F – Technology Overview
- G – Transmission Constraint Analysis
- H – Federal, State and County Requirements
- I – Ecoregions of the 6-State Study Area
- J – Special Status Species
- K – Government-to-Government and Cultural Resource Consultations
- L – GIS Methods and Data Sources
- M – Methods and Data Sources
- N – Viewshed Maps for SEZs

*Mitigation measures are brought forward to Appendix A and presented there as required design features.



Overview of the NEPA Process

- What is in an EIS?
 - An EIS provides a comprehensive analysis of **environmental and socioeconomic impacts**.
 - An EIS must describe the **purpose and need** for a proposed action, identify **impacts and mitigation measures**, analyze **alternatives**, and discuss **cumulative impacts**.
 - An EIS describes how **public concerns** were treated. A Final EIS addresses all comments received on the Draft.
 - NEPA requires that an EIS be prepared for **major federal actions with potential for significant impact** on the quality of the human environment.
 - A Programmatic EIS evaluates the environmental **impacts of broad agency actions**, it does not evaluate specific projects.



Solar Energy Development Programmatic EIS

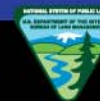
INFORMATION CENTER

HOME ABOUT THE EIS GETTING INVOLVED SOLAR ENERGY SOLAR ENERGY ZONES MAPS DOCUMENTS

NEWS • FAQs • GLOSSARY • E-MAIL SERVICES

The project website (<http://solareis.anl.gov>) provides access to:

- The PEIS document
- Information on the EIS process
- Information on solar energy resources and technologies
- Information on the 24 proposed SEZs
- Maps and mapping tools
- EIS-related documents
- Project schedule
- **Online comment form**
- Project updates
- Email notifications

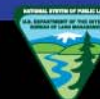


How to Provide Comments on the Draft PEIS

There are 3 ways to provide comments:

- At the public meetings
- Via the project website: <http://solareis.anl.gov>
- Via mail

Comments will be accepted through April 16, 2011.



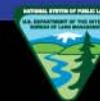
How to Comment Effectively

- The Agencies are seeking input on:
 - Potential errors or omissions in data
 - New or amended alternatives
 - Appropriateness of identifying proposed SEZs, or portions thereof, as priority areas for utility-scale solar energy development
 - Categories of land to be excluded from solar energy development
 - Proposed policies and required design features applicable to this development
- Comments should be:
 - Clear and concise
 - Relevant to the purpose and need for the proposed actions
 - Referenced to specific sections of the PEIS (volume, section, page, line number)



How to Submit Written Comments

- Use the online comment form on the project website (preferred):
<http://solareis.anl.gov/involve/comments>
 - Can attach files up to 15 MB
- To submit other written comments and/or supplemental material:
 - Mail to:
Solar Energy PEIS
Argonne National Laboratory
9700 S. Cass Avenue – EVS/240
Argonne, IL 60439



Providing Oral Comments at this Meeting

- Sign up to speak at registration desk
 - Speakers will be called in the order they sign up
 - Unregistered speakers will follow
- Making an oral comment:
 - State your name and affiliation
 - 5-minute limit, additional time as schedule allows
- Comments will be recorded in transcripts that will be posted on the project website.



For More Information

- Visit the project website:
<http://solareis.anl.gov>
- Contact the Federal agencies:
 - Linda Resseguie, BLM Washington Office,
linda_resseguie@blm.gov, 202-912-7737
 - Jane Summerson, Department of Energy,
jane.summerson@ee.doe.gov, 202-287-6188

