

[Billing Code 6450-10-P]

**U.S. DEPARTMENT OF ENERGY**

Record of Decision for Issuance of Loan Guarantees to Solar Partners I, LLC; Solar Partners II, LLC; and Solar Partners VIII, LLC (Solar Partners) for Ivanpah Solar Electric Generating System Units 1, 2, and 3.

**AGENCY:** U.S. Department of Energy (DOE), Loan Programs Office (LP)

**ACTION:** Record of Decision (ROD).

**SUMMARY:** The U.S. Department of Energy (DOE) announces its decision to issue loan guarantees under Title XVII of the Energy Policy Act of 2005 (EPA 05) to Solar Partners I, LLC; Solar Partners II, LLC; and Solar Partners VIII, LLC (Solar Partners) for construction and start-up of Units 1, 2, and 3 of the 370 megawatt (MW) Ivanpah Solar Electric Generating System (ISEGS) on 3,471.36 acres, all of which are managed by the U.S. Department of the Interior, Bureau of Land Management (BLM), in San Bernardino County, California. The environmental impacts of the construction and operation of this project were analyzed in the *Proposed California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement for the Ivanpah Solar Electric Generating System, San Bernardino County, California* (75 FR 47592; 08/06/10) (Final EIS), prepared by the BLM Needles Field Office with DOE as a cooperating agency. DOE was consulted during the preparation of the EIS and provided comments, which BLM incorporated. DOE determined that the project analyzed in the

Final EIS was substantially the same as the project that would be covered by the DOE loan guarantees, and a notice of DOE's adoption of the Final EIS as DOE/EIS-0416 was published by the U.S. Environmental Protection Agency (EPA) in the Federal Register on October 22, 2010 (75 FR 65320).

**ADDRESSES:**

Copies of this ROD and the Final EIS may be obtained by calling Sharon Thomas, NEPA Document Manager, Environmental Compliance Division, Loan Programs Office (LP-10), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC, 20585; telephone 202-586-5335; or e-mail [Sharon.R.Thomas@hq.doe.gov](mailto:Sharon.R.Thomas@hq.doe.gov), or by accessing these documents on the DOE NEPA website at [www.nepa.energy.gov](http://www.nepa.energy.gov) and at the Loan Programs website at [www.loanprograms.energy.gov](http://www.loanprograms.energy.gov).

**FOR FURTHER INFORMATION CONTACT:** Sharon Thomas, NEPA Document Manager, Environmental Compliance Division, Loan Programs Office (LP-10), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC, 20585; telephone 202-586-5335; or e-mail [Sharon.R.Thomas@hq.doe.gov](mailto:Sharon.R.Thomas@hq.doe.gov). For general information about the DOE National Environmental Policy Act (NEPA) process contact Carol Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC, 20585; telephone 202-586-4600; leave a message at 800-472-2756; or e-mail [AskNEPA@hq.doe.gov](mailto:AskNEPA@hq.doe.gov). Information about DOE NEPA activities and access to DOE NEPA documents are available through the DOE NEPA Web site at <http://www.nepa.energy.gov>.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

The ISEGS Project will be on 3,471.36 acres in the eastern part of San Bernardino County, California, approximately 40 miles southwest of Las Vegas, Nevada. The applicant plans to develop three power plants in separate and sequential phases to generate 370 MW of electricity. Ivanpah 1 will generate 120 MW, and Ivanpah 2 and 3 will each generate 125 MW. Each plant will be comprised of fields of heliostats (elevated mirrors guided by a tracking system) focusing solar energy on boilers located on centralized power towers. Each heliostat in the field will track the sun throughout the day and reflect the solar energy to a power tower boiler. In each of the three plants, one steam turbine will receive live steam from the power tower boiler for the generation of electricity.

On August 29, 2007, BLM received applications from subsidiaries of BrightSource Energy, Inc. (Solar Partners) pursuant to Title V of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1761) for right-of-way (ROW) grants to construct, operate, maintain, and decommission the ISEGS project on public land in San Bernardino County, California. BLM's California Desert Conservation Area (CDCA) Plan (1980, as amended), while recognizing the potential compatibility of solar power generation facilities on public lands, requires that all sites associated with power generation or transmission not identified in that plan be considered through the plan amendment process. BrightSource Energy, Inc. applied to DOE for loan guarantees under Title XVII of EPAct 05, in November 2008 for ISEGS Phase 1 and in February 2009 for ISEGS Phases 2 and 3.

### **NEPA Review**

BLM was the lead agency in the preparation of the Final EIS. Pursuant to a February 2009, Memorandum of Understanding between BLM and DOE, DOE participated as a cooperating agency with BLM in preparation of this EIS in order to consider the potential environmental impacts of DOE's proposed loan guarantees for construction and start-up of Units 1, 2, and 3 of the ISEGS project.

EPA published a Notice of Availability of the Draft EIS on November 13, 2009 (74 FR 58625), and BLM published a Notice of Availability of the Draft CDCA Plan Amendment in the Federal Register on November 10, 2009 (74 FR 58043). The Draft EIS was available for a 90-day public comment period which closed on February 11, 2010. After issuance of the Draft EIS for public review, BLM continued to coordinate and consult regarding possible refinements to avoid sensitive resources, including wildlife and plant species, on the ISEGS project site. As a result, two additional project alternatives that could avoid or reduce impacts were developed by the applicant and were analyzed by BLM in a Supplemental Draft EIS. These alternatives included the Mitigated Ivanpah 3 Alternative and the Modified I-15 Alternative. These alternatives included modification of the project boundaries in order to avoid sensitive resources, a reduction in overall project acreage from 4,073 acres to approximately 3,471 acres, a reduction in the number of heliostats, and a resulting reduction in the power output from 400 MW in the proposed project to 370 MW in each of the additional alternatives. EPA published a Notice of Availability of the Supplemental Draft EIS in the Federal Register on April 16, 2010 (75 FR 19992). The public comment period on the Supplemental Draft EIS closed on June 1, 2010. Comments received on the Draft EIS and the Supplemental Draft EIS were addressed in the Final EIS announced by EPA in the Federal Register on August 6, 2010 (75 FR 47591). Comments received on the Final EIS were addressed in Appendix 1 of the *Record of Decision*

*for the Ivanpah Solar Electric Generating System Project and Associated Amendment to the California Desert Conservation Area Plan (BLM ROD), which is available at [www.blm.gov](http://www.blm.gov) or by calling the BLM Needles Field Office at 760-326-7000.*

On February 22, 2010, DOE announced its decision to offer conditional commitments to Solar Partners to provide up to \$1.37 billion in loan guarantees to support the financing of the ISEGS project. The conditional commitments each contained a condition precedent which required completion of the NEPA process before the loan guarantees could be closed. Notice of DOE's adoption of the Final EIS was published by EPA in the Federal Register on October 22, 2010 (75 FR 65320).

#### **Alternatives Considered**

BLM considered four alternatives, including the project as identified in the Final EIS as the Proposed Action (the project as proposed by Solar Partners), the Mitigated Ivanpah 3 Alternative (selected by BLM in their ROD and identified in the Final EIS as the preferred alternative), the Modified I-15 Alternative, and the No Action Alternative. These alternatives were described in detail and fully analyzed in the Final EIS.

The BLM decision to select the Mitigated Ivanpah 3 Alternative includes mitigation measures identified in the Final EIS chapter 4, Affected Environment and Environmental Consequences. These include measures specified in Terms and Conditions in the Biological Opinion (see BLM ROD Appendix 2, U.S. Fish and Wildlife Service Biological Opinion), and Terms and Conditions set out in the Programmatic Agreement between BLM, the Southern California Edison Company, the California State Historic Preservation Officer, and the Nevada State Historic Preservation Officer (see Appendix 3, Programmatic Agreement, in BLM ROD).

The complete language of these measures, terms, and conditions is provided in the Plan of Development for the ISEGS project and is contained in Appendix 4 of BLM's Compliance Monitoring Plan set out in the BLM ROD. BLM has incorporated these requirements as terms and conditions into the ROW grants.

DOE's decision is whether or not to issue loan guarantees to Solar Partners for up to \$1.37 billion to support construction and start-up of the ISEGS project. Accordingly, DOE's alternatives are (1) to issue loan guarantees to Solar Partners for the Mitigated Ivanpah 3 Project alternative selected in the BLM ROD, and (2) No Action Alternative, i.e., no loan guarantees.

### **Consultation**

BLM is the lead Federal agency for compliance of the ISEGS project with Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and the Bald and Golden Eagle Protection Act, and for Tribal consultation. The mitigation measures included in the BLM decision resulted from these consultations and are addressed in the Final EIS and BLM ROD. In addition, BLM has consulted with the U.S. Army Corps of Engineers who provided a written jurisdictional decision that the ISEGS project is unlikely to impact waters of the U.S.; and consulted and received required approvals from the Federal Aviation Administration regarding aviation impacts; the National Park Service regarding impacts on national parks; and the State of California and San Bernardino County regarding compliance with state and local laws.

### **Decision**

On October 7, 2010, BLM issued its ROD and approved the Proposed Plan Amendment to the CDCA Plan to allow for solar energy right-of-way grants to Solar Partners for the ISGES project

to be constructed on BLM-managed land. The Secretary of the Interior also issued Secretarial Approval of these decisions on this date.

DOE has decided to select alternative (1) identified above: to issue loan guarantees for construction and start-up of the Mitigated Ivanpah 3 Project, which BLM selected in its ROD. The Mitigated Ivanpah 3 Project would be the development of three solar concentrating thermal power plants. Under alternative (2), the No Action Alternative, DOE would not issue loan guarantees for the project, and it is unlikely that Solar Partners would implement the project as currently planned. While the direct and indirect environmental impacts of the ISEGS would be avoided under the No Action Alternative, the benefits of reduced greenhouse gas (GHG) emissions and the opportunity to make use of new technology to reduce GHG emissions and air pollutants would be lost.

Approval of the loan guarantees for the ISEGS project responds to DOE's purpose and need pursuant to Title XVII of EAct 05 (42 U.S.C. 16511–16514) for eligible projects under Section 1703 of Title XVII, which authorizes the Secretary of Energy to make loan guarantees for projects that (1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases and (2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued.

Issuance of loan guarantees for projects under Section 1703 of Title XVII of EAct 05 facilitates the acceleration of the commercialization of innovative, environmentally-friendly technologies that will have an impact on ensuring clean, affordable, and reliable supplies of energy. The purpose and need for DOE's loan guarantee action is to comply with DOE's mandate under Title XVII of EAct 2005 by selecting eligible projects that meet the goals of the Act.

In addition, approval of the loan guarantees for the ISEGS project also responds to DOE's purpose and need pursuant to Title XVII of the Energy Policy Act of 2005, which authorizes the Secretary to make loan guarantees for eligible projects under Section 1705 of Title XVII (implemented pursuant to Section 406 of the American Recovery and Reinvestment Act of 2009). Eligible projects include renewable energy projects and related manufacturing facilities, electric power transmission projects, and leading edge biofuels projects. The primary purposes of the Recovery Act are job preservation and creation, infrastructure investment, energy efficiency and science, assistance to the unemployed, and State and local fiscal stabilization. Issuances of loan guarantees for eligible projects under Section 1705 are designed to address the current economic conditions of the nation, in part, through renewable energy, transmission, and leading edge biofuels projects. Eligible projects must commence construction by September 30, 2011.

### **Mitigation**

The ISEGS project that will be supported by issuance of the DOE loan guarantees includes all mitigation conditions applied by BLM in its ROW grants for this project. BLM is the Federal lead agency for the ISEGS project under NEPA and is responsible for ensuring compliance with all adopted mitigation measures for the ISEGS project set out in the Final EIS. The complete language of all the measures is provided in the BLM ROD and in Appendix 4, Compliance Monitoring Plan. BLM has also incorporated these mitigation measures into the ROW grants as terms and conditions.

DOE's loan guarantee agreements require the applicant to comply with all applicable laws and the terms of the ROW grants, including mitigation measures contained therein. An applicant's failure to comply with applicable laws and the ROW grants would constitute a default. Upon the

continuance of a default, DOE would have the right under the loan guarantee agreement between it and the applicant to exercise usual and customary remedies. To ensure that the applicant so performs, the DOE Loan Programs Office proactively monitors all operative loan guarantee transactions.

### **Environmentally Preferred Alternative**

Following analysis and comparison of the alternatives in the Supplemental Draft and Final EISs, the 370 MW Mitigated Ivanpah 3 Alternative was identified by BLM as the Environmentally Preferred Alternative and is the Selected Alternative identified in the BLM ROD.

DOE has decided that its alternative (1), to issue loan guarantees for construction and start-up of the Mitigated Ivanpah 3 Project, is environmentally preferable. DOE has determined that this alternative offers substantial environmental benefits due to reductions in GHG emissions and that all practicable means to avoid or minimize environmental harm have, as described in the BLM ROD and Appendices for the ISEGS project, been adopted as mitigation measures by BLM.

Issued in Washington, D.C. on April 4, 2011.



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