PMC-EF2a

(2.04.02)

## U.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER NEPA DETERMINATION



RECIPIENT: Abengoa Solar Inc.

STATE: CO

PROJECT TITLE:

Reducing the Cost of Thermal Energy Storage for Parabolic Trough Power Plants

Funding Opportunity Announcement Number DE-PS36-08GO98032

GO18156

Procurement Instrument Number NEPA Control Number CID Number GFO-GO18156-003

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

## CX, EA, EIS APPENDIX AND NUMBER:

Description:

- A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

## Rational for determination:

This NEPA review is a continuation of GFO-09-052 for the NEPA clearance of Phase 2 of the original project. This NEPA determination applies to Phase 2 of this award. Phase 2 of the project will entail component development, integrated model development, component testing, performance and economic analysis, and reporting.

Analytical work and bench-top experiments will take place at Abengoa Solar Inc. to study thermal conductivity enhancements. The component testing task work will take place at Oak Ridge National Laboratory (ORNL) for corrosion testing of typical heat exchanger materials. ORNL is responsible for the completion of the NEPA review for the portion of the project to be completed at ORNL.

The applicant has submitted an R & D questionnaire for work performed at Abengoa Solar Inc. which thoroughly addresses the chemical and safety handling protocols associated with this projects laboratory research.

This project is comprised of information gathering and bench scale research and development activities; therefore a CX A9 & B3.6 will apply.

## NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

	Prohibited actions include: Phase 3
	This restriction does not preclude you from:
	Phase 2
	If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.
	Note to Specialist:
	The NEPA determination completed by ORNL should be submitted to Golden and become a part of the original project file.
	This NEPA determination does not apply to Phase 3 activities.
	Eugene Brown 5/4/2011
SIG	ENATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.
NEI	PA Compliance Officer Signature: Date: 5/6/2011
FIE	CLD OFFICE MANAGER DETERMINATION
	Field Office Manager review required
NC	O REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:
	Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
	Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.
BAS	SED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:
Field	d Office Manager's Signature: Date:
	Field Office Manager