PMC-EF2a
(2.06.02)

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

RECIPIENT: INFINIA CORPORATION **STATE:** WA

PROJECT TITLE : Innovative Phase Change Thermal Energy Storage Solution for Baseload Power

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000104	DE-EE0003585	GFO-10-490	GO3585

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:

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:

Infinia Corporation proposes to use federal funds to develop and demonstrate a system for power generation using thermal energy storage. The goal of their research is to effectively and efficiently store energy at low costs.

This project will involve three phases. Phase 1 will include lab scale module design and demonstration of the thermal energy storage, heat transport system/receiver design, system preliminary design, and cost analysis.
Phase 2 will involve detailed design of the thermal energy storage, heat transport system, and dual dish concept; as well as heat transport system demonstration, system integration design, and levelized cost of energy factor refinement.

Phase 3 will involve fabrication and procurement of all demonstration components, assembly of the system, tests and evaluation, design of a larger 30 kW system, cost of energy factor verification.

This project comprises of conventional laboratory work to include siting and construction of an indoor bench scale project to develop thermal energy storage; therefore a CX B3.6 applies to Phase 1 and 2. Phase 3 is restricted at this time because a test site has not been identified.

NEPA PROVISION

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 is restricted at this time. Upon identification of a testing site, an additional EF1 will be required.
This restriction does not preclude you from:
Phase 1 and 2 activities.
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 :

Eugene Brown 7/20/2010

The NEPA Compliance Officer recommends that this award be put on ASAP approval due to the NEPA conditions described above.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 7/26/2010
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO 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.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager