

PMC-EF2a

(2.0+02)

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



RECIPIENT: National Center for Manufacturing Sciences

STATE: MI

PROJECT TITLE : Mfg Industrial Development- Hybrid Laser ARC Welding of Wind Towers

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000271	GFO-10-048-001	GOO

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:

The National Center for Manufacturing Sciences (NCMS) is proposing to use congressionally directed funding through DOE to demonstrate the feasibility of affordable manufacturing of alternative energy systems.

A prior NEPA review has been completed for this project for task 1.0. Since this time, additional tasks (tasks 2.0 and 3.0) have been added to the SOPO for this award. Objectives for the added scope of work involves developing a program that will leverage technologies from other industrial sectors and conduct research projects on manufacturing research technologies with the potential to reducing the cost for wind energy systems.

All tasks currently under this project include:

- Task 1 - Manufacturing Technology Development and Implementation (Previous NEPA determination of CX A9 and CX A11 for this task)
- Task 2 - Advanced Manufacturing for Modular Electro-kinetic (E-K) Wind Energy Conversion Technology
- Task 3 - Hybrid Laser Arc Welding (HLAW)
- Task 4 - Project Management

Task 2 involves conventional desk-top studies and laboratory research to determine the feasibility of enhancing manufacturing techniques from the automotive sector to produce lower-cost E-K wind energy systems.

Task 3 involves using a specific type of welding and applying it to thinner metals for the wind turbine tower with the objective of increasing productivity while reducing energy consumption during manufacturing.

Laboratory research, modeling, and welding activities under task 2-3 will take place at two selected sub-recipients under this award, Accio Energy and AMET. The Accio facilities are located in an industrial park in Ann Arbor, Michigan. The AMET facilities are located in the Rexburg Business Park in Rexburg, ID. This facility was specifically designed to enable efficient design and manufacture of systems for industrial and technical welding applications. Representative for both sites have filled out an R&D/Facility questionnaire that fully describes their chemical handling, safety protocols, disposal protocols and compliance with applicable federal, state and local standards.

Tasks 2-4 of this project involve desktop studies, information gathering, management activities, and conventional laboratory and manufacturing activities in existing facilities with established protocols that will reduce or eliminate potential impacts to the human and natural environment; therefore a CX A9 and B3.6 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Review completed by Laura Margason - 9.29.2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 9/29/10
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