PMC-EF2a

(2.06.02)

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

RECIPIENT: University of Nebraska-Lincoln **STATE:** NE

PROJECT TITLE : Sustainable Energy Options for Rural Nebraska

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
FY 2010 CDP	DE-EE0003098	GFO-10-503	EE3098

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).

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

The University of Nebraska-Lincoln proposes to use federal funds to conduct a research and outreach program utilizing small wind turbines and solar cell arrays to generate electricity and an ethanol-fueled engine powered irrigation pump.

This project will include establishing a wind and solar research facility, development of biofuel-powered irrigation pump and installation at the Haskell Agricultural Laboratory, and develop and evaluate a monitoring system to deliver field data related to energy generation and ethanol engine performance to state and regional audiences.

The research facility will be located in the northwest corner of the Haskell Agriculture Laboratory on a 2-3 acre plot and consist of a 14' x 20' steel shelled building to house electronic recording devices. The facility will be erected on previously disturbed, plowed agriculture lands and will involve a concrete slab of 2 inches thick. The 200W solar array will be located on the south side of the building and would mount on a post with concrete footer. The wind turbines will be located on 18 m poles in the northwest corner of the planned site and will create 5 & 6 kWh of power.

The biofuel-power irrigation pump will be installed on an already existing irrigation system and well.

The University of Nebraska has contacted the USFWS about this project and has determined that the project will have no adverse impacts relating to the Endangered Species, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.

This project comprises of information dissemination, research resulting in the construction of a laboratory, and actions to conserve energy through the use of wind turbines and solar arrays; therefore a CX A9, B3.6 & B5.1 will apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/8/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/8/10

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