

PMC-EF2a

(2.04.02)

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



RECIPIENT: Western New England College

STATE: MA

PROJECT TITLE : Next Generation Wind Turbine

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
FY2010 CDP	DE-EE0003276	GFO-10-415	0

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:

FloDesign proposes to use federal funding to allow Western New England College to collaborate in advancing a novel wind turbine concept. They will fabricate and test a scale model, then fabricate a prototype for deployment on a portable tower.

Indoor laboratory work will take place at FloDesign's Wind Aerodynamic Testing facility located in Wilbraham, MA. An R & D questionnaire has been submitted that thoroughly addresses chemical and safety handling protocols.

This prototype wind turbine will be tested using a temporary portable tower for a period of 6-9 months. Installation will involve placement of weighted anchors at the selected site. Wind test site location: State owned property in Rutland, MA. The site is the former Rutland Heights State Hospital grounds. The hospital was demolished in 2006. Since the above ground level height is below 200 feet and since the site is not in the vicinity of an airport, the FAA has determined the installation to be of no hazard to air navigation.

Department of Energy correspondence dated Aug 10, 2010 with USFWS New England Field Office states that they do not anticipate high level impacts to migratory birds due to the size and temporary nature of this project.

This project is comprised of information gathering and conventional research and development as well as temporary deployment of a wind turbine prototype; therefore a Catex 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 8/26/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 8/26/10
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