

PMC-EF2a

(20402)

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



RECIPIENT: University of Delaware

STATE: DE

PROJECT TITLE : Wind Turbine Model and Pilot Project for Alternative Energy: Infrastructure for Research, Policy, Education and Outreach on Wind Power along our Nation's Coasts

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
2009 CDP	DE-EE0000297	GFO-10-328	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.
- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:
- C12** Siting, construction, and operation of energy system prototypes including, but not limited to, wind resource, hydropower, geothermal, fossil fuel, biomass, and solar energy pilot projects.

Rational for determination:

The University of Delaware proposes to construct one shore-side, utility-scale wind turbine at their Lewes Campus. The objective is to provide educational opportunities for students, facilitate research (science/engineering/policy) on aspects of wind energy that are specific to the coastal environment (salt tolerance, impact on migratory birds in the Atlantic flyway), take advantage of expertise in the UD composite center to develop and test the next generation of turbine blades, and anticipate the emergence of policy issues. In addition, the energy produced via this turbine will offset the University's electrical consumption and costs.

The project phases and tasks are as follows:

Phase 1 – Project Design and Permitting

Task 1: Public Outreach

Task 2: Foundation and Geotechnical Considerations for Site (preliminary)

Task 3: Permitting Studies

*Subtask 3.1 Avian and Wildlife Impact Assessment

*Subtask 3.2 Wetlands Delineation

Task 4: Permitting

*Federal Permits

*State Permits

*Local Permits

Task 5: Electrical Design (preliminary)

Phase 2 - Construction

Task 6 - Civil Construction

Task 7 - Electrical Construction

Task 8 - Mechanical Installation

Phase 3 - Turbine Transportation and Installation

Task 9: Wind Turbine Equipment

Task 10: Commissioning/Site Engineering

Task 11: Management/Labor/Contingency

The following permits and consultations have been acquired by the recipient as of March 22, 2010:

- 1) DNREC Alternatives Analysis August 13, 2009

- 2) UDPhase I Avian Risk Assessment, Final Report, January 2010
- 3) Acoustic Study, 1-14-10 Lewes, DE, Gamesa
- 4) City of Lewis Agreement, 2-13-2010
- 5) FAA, Determination of no hazard to aviation, 10-9-2010
- 6) DNREC Stormwater Approval, 3-1-2010
- 7) University of Delaware-Gamesa press release, 10-19-2009
- 8) Shadow Flicker Analysis, 2-24-2010
- 9) Endangered Species Report, 2-26-2010
- 10) Wind Energy Feasibility Report, 5-19-2009
- 11) Visualization Assessment, 2-24-2010
- 12) City of Lewes Delaware Building Permit, 2-24-2010
- 13) Dewatering System Permit, 3-23-2010
- 14) University of Delaware dewatering plan,
- 15) List of public outreach meetings held, 3/23/2010
- 16) Delaware Coastal Management Zone Comments on turbine location, 12-23-2009
- 17) Delaware DNREC Division of Fish and Wildlife comments on turbine location, 12-23-2009
- 18) Delaware DNREC Division of Water Resources comments on turbine location, 12-22-2009

Existing and potential impacts are unknown at this time. Per the DOE NEPA implementing regulations (Appendix C to Subpart D to 10 CFR Part 1021 - C12, as noted above), preparation of an Environmental Assessment is required for Phases 2 and 3, prior to allowing federal funds for this proposed project.

The CX A9 and B3.1 applies to Phase 1, Tasks 1-5 (preliminary design) activities only.

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:

DOE funds are not authorized for final design, capital equipment purchase, project site preparations and all construction activities (Phases 2 and 3, excluding task 11) pending outcome of the environmental assessment.

This restriction does not preclude you from:

Phase 1 activities (preliminary design only) and task 11 (project management)

The University of Delaware is authorized to initiate the preparation of an EA by a third-party contractor, consistent with DOE NEPA implementing regulations. DOE, University of Delaware and third-party contractor shall enter into a Memorandum of Agreement (MOA) defining the scope of services to be completed by the third-party contractor on behalf of DOE.

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.

Insert the following language in the award:

You are required to:

The University of Delaware is authorized to initiate the preparation of an EA by a third-party contractor, consistent with DOE NEPA implementing regulations. DOE, University of Delaware and third-party contractor shall enter into a Memorandum of Agreement (MOA) defining the scope of services to be completed by the third-party contractor on behalf of DOE.

Note to Specialist :

Phases 2-3 of this project will require the preparation of an environmental assessment. We recommend the recipient's grant be placed on ASAP approval.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Robert L. Sweeney, Ph.D.
NEPA Compliance Officer

Date: 3/29/10

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: [Signature]
Field Office Manager

Date: 3/29/10