PMC-EF2a
(2.04.02)

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

RECIPIENT: Boulder Wind Power

STATE: CO

PROJECT TITLE : Boulder Wind Power Advanced Gearless Drivetrain

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000439	DE-EE0005138	GFO-0005138-001	EE5138

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).

DOE/EA-1440 Final Site-Site Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (February 2003)

Rational for determination:

Boulder Wind Power is proposing to use DOE funding to develop a concept design for a 6-10MW offshore turbine Drivetrain system. The project would demonstrate how this technology would result in increased power ratings and the cost effectiveness as part of a turbine system, resulting in less than $0.10/kWh cost of energy for offshore applications.

Project activities in Phase I (Tasks 1 – 9) would consist of computer design and analysis of a conceptual 6MW offshore wind turbine incorporating the Boulder Wind Power proprietary generator technology. Activities in Phase II (Tasks 11-21) would consist of optimizing designs from Phase 1 tasks via high-level computer modeling and analyses and in-lab testing of high-risk system components.

Phase II testing activities would be performed at Boulder Wind Power's facilities in Montana using the facility's existing equipment and test stands. This facility has established standard safety protocols that meet all applicable OSHA standards. No hazardous waste, liquid effluent, or chemicals would be used in testing any of the drivetrain system's components. The recipient submitted a R&D questionnaire that thoroughly addresses this facility's standard operating protocols, permits and safety equipment.

Additional testing and verification of the prototypes would be tested at the National Renewable Energy Laboratory in Golden, Colorado. Testing activities would include mechanical and electrical tests of components and equipment in a controlled, indoor environment. No emissions or waste would result from the planned testing activities. Standard laboratory operations are covered under the lab's Sitewide Environmental Environmental Assessment (DOE/EA-1440).

This project involves data gathering, data analysis, computer modeling, project management activities and indoor bench-scale research and testing of prototypes. The impacts related to these tasks are anticipated to have negligible or no affects on the human and natural environment. Project activities are consistent with actions outlined in categorical exclusion A9 (information gathering, data analysis, dissemination) and B3.6 (operations for indoor bench-scale research projects, conventional laboratory operations and small-scale research and development projects). CX A9 and B3.6 apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

BUDGET INFO:

Budget Period I ($1,037,350)
DOE Share = $700,000 / Cost Share = $337,350

Budget Period II ($2,646,294)
DOE Share = $1,618,279 / Cost Share = $1,028,015

EF2a completed by Laura Margason

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 8/25/2011
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