

PMC-EF2a

(20-02)

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



RECIPIENT: Honeywell International Inc., Honeywell Laboratories - ACS

STATE: MN

**PROJECT TITLE :** Condition Based Monitoring for Wind Farms

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-09GO99009	DE-EE0001368.000	GFO-10-006	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).
- A11** Technical advice and planning assistance to international, national, state, and local organizations.

Rational for determination:

The objective for this project is to improve turbine reliability and reduce operation and maintenance costs. Honeywell will be conducting gearbox mechanical failures, through vibration monitoring. During task 1, they will be developing a prototype monitoring system and test it on an existing wind turbine located at a nearby wind farm. A vendor will be assembling the monitoring system and Honeywell personnel will install the data collection unit onto the select turbine.

The wind farm being utilized for this monitoring is the Woodstock Wind farms, located 1 mile south and 1 mile east of Woodstock, MN. They currently have 17 Vestas V-44/600kw wind turbines and have been commercially operational and permitted since 1998. The wind farm and Honeywell have established protocols in place regarding safety and comply with applicable OSHA standards.

Task 1 will involve a small pilot project monitoring system installment on an existing wind turbine; therefore a CX B3.6 will apply.

Tasks 2-7 will involve data gathering, computational modeling and technical advice activities; therefore a CX A9 and A11 will apply for these tasks.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_

Date: \_\_\_\_\_

12/17/09