

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY  
NEPA DETERMINATION**

**RECIPIENT:**NREL**STATE:** CO**PROJECT TITLE** : NWTC Joint Industry Megawatt Scale Gearbox Field Tests; NREL Tracking No. 16-007

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-AC36-08GO28308	NREL-16-007	GO28308

**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:

<b>DOE/EA 1914 (NREL NWTC)</b>	Final Site-Wide Environmental Assessment of the Department of Energy's National Wind Technology Center at the National Renewable Energy Laboratory
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**Rationale for determination:**

BroadWind Energy and National Renewable Energy laboratory (NREL) researchers at the National Wind Technology Center (NWTC) are proposing a collaboration to investigate axial bearing failures inside BroadWind gearboxes. The purpose of this project is to gather gearbox load data while the gearbox is installed in an operating nacelle.

Monitoring devices would be produced by NREL researchers and installed in a new BroadWind gearbox. A crane would then be used to remove the existing gearbox from the 1.5MW GE turbine located at NWTC Site 4.0 and install the new BroadWind gearbox. This gearbox exchange is a standard maintenance practice at a wind farm and typically takes two workdays. The BroadWind gearbox and monitoring equipment would operate for up to one year. Removal of the tested gearbox components would occur at the end of the monitoring period and those components would be replaced with new components.

Based on the Department of Energy's Final Site-Wide Environmental Assessment (DOE/EA-1914) of the NWTC and the related field studies and agency consultations, no impacts to cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands are expected from the proposed project. If the gearbox exchange occurs between March 15th and September 15th, and work off the existing road surface is required, a nesting bird survey would be performed prior to the beginning of outdoor activities.

National Renewable Energy Lab (NREL) employees and contractors would follow federal and state regulations, and applicable NREL Environment, Health, and Safety Policies, Procedures and Programs.

The installation, testing, and operation of the NWTC Joint Industry Megawatt Scale Gearbox Field Tests is consistent with the activities analyzed in the DOE/EA-1914. The DOE/EA-1914 and the associated Finding of No Significant Impact (FONSI) are hereby incorporated by reference. The DOE has determined that the proposed activities are bounded by the environmental impact analysis contained in DOE-EA 1914, and FONSI, and no further NEPA review is required.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Review completed by Chris Rowe 5/3/2016

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

NEPA Compliance Officer Signature:



Kristin Kerwin

Date: 5/4/2016

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