

PMC-EF2a

(2.0x02)

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



RECIPIENT: Oklahoma Department of Commerce

STATE: OK

**PROJECT TITLE :** Wind turbine installation for Town of Drummond

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000013	DE-EE0000922	GFO-0000922-009	GO922

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:

**B5.18 Wind turbines** The installation, modification, operation, and removal of a small number (generally not more than 2) of commercially available wind turbines, with a total height generally less than 200 feet (measured from the ground to the maximum height of blade rotation) that (1) are located within a previously disturbed or developed area; (2) are located more than 10 nautical miles (about 11.5 miles) from an airport or aviation navigation aid; (3) are located more than 1.5 nautical miles (about 1.7 miles) from National Weather Service or Federal Aviation Administration Doppler weather radar; (4) would not have the potential to cause significant impacts on bird or bat populations; and (5) are sited or designed such that the project would not have the potential to cause significant impacts to persons (such as from shadow flicker and other visual effects, and noise). Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices. Covered actions include only those related to wind turbines to be installed on land.

**Rational for determination:**

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Town of Drummond, Oklahoma under the DOE's American Recovery and Reinvestment Act of 2009 Energy Efficiency and Conservation Block Grant Program (EECBG). The Town of Drummond proposes to use \$250,000 to construct community wind turbines to benefit the Drummond public school.

The Town of Drummond, Oklahoma proposes to install five, 10 kW wind turbines on a plot of land to the south east of the town, 290 ft. to the east of Kansas Avenue. The proposed turbine site is located approximately one mile east of Drummond Flats, a man-made and maintained wildlife management area comprised of various wetland complexes and habitat types. The Bergey Excel wind turbines would be installed on a large agricultural field. Each turbine would have a height of 133.5 ft., a rotor diameter of 22.75 ft. and be spaced 141 ft. apart on an east to west axis. The rotor blades would be constructed of fiberglass. Each foundation would be 18 sq. ft. and 4 ft. deep, made of concrete, anchor rods and steel. The five monopoles would be mounted using a crane and no new access roads would need to be created due to the proximity to Otoe and Kansas Street. A shadow flicker study, decibel reading and visual influence study have been conducted.

The U.S. Fish and Wildlife Service (USFWS) Endangered Species Program website identifies three species in Garfield County, OK: Whooping crane, Piping plover and Interior least tern. The USFWS concurred with DOE's determination that the five proposed wind turbines may affect, but are not likely to adversely affect the three listed species. There are no cultural resources or floodplains within reasonable proximity to the proposed project location.

A shadow flicker study performed by Wind Energy Consulting and Contracting, Inc. (WECC) shows the primary buildings affected by the proposed wind turbines would be the Fire Station and the Ag Building with a maximum of 28 minutes duration in the morning hours from March through September. This maximum duration of disturbance is based on the assumption enough wind would be present during these times for the turbines to be in operation. A visual study performed by WECC found some part of the wind turbines would visible from all parts of the Town of Drummond. The placement of the proposed wind turbines would not block or obstruct any significant landscape views as the Town of Drummond is a small farming community located on a nearly flat landscape.

A noise study performed by WECC found the noise level at all locations analyzed would be below the maximum allowable level of 50 dB, equivalent to the noise of a typical office. It is highly unlikely the noise of the turbines would be perceptible above ambient background noise from the surrounding area.

The proposed wind turbines would not obstruct any of the existing or planned microwave links and no Federal Aviation Administration (FAA) permits would be required because the turbine heights would not exceed 200 ft.

Based on a review of the proposed project and supporting documentation, DOE has determined that the proposed five wind turbines would not have an adverse effect to threatened or endangered species, wetlands, floodplains, biological resources, cultural resources or other sensitive resources due to the small scale of the project and the proposed location. DOE has determined the work outlined is consistent with the actions identified in categorical exclusion B5.18, "wind turbines," and is categorically excluded from further NEPA review.

**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 :

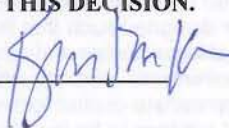
Kelly Daigle 12/13/2012

DOE Share: \$250,000  
Total Project Cost: \$250,000

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

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

 **Electronically Signed By: Kristin Kerwin**  
NEPA Compliance Officer



Date: 12/19/2012

**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: \_\_\_\_\_

Field Office Manager

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