

PMC-EF2a

(2010)

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



RECIPIENT: Monarch Wind Power LLC

STATE: IL

PROJECT
TITLE : Monarch Warren County Turbine Project

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number
GO0

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 proposed project consists of the development and construction of a 20MW wind generation facility on approximately 750 acres of land leased in Warren County, Illinois in collaboration with GE Energy (turbine supplier). The site is located about four miles south of Monmouth in West Central Illinois along both sides of Route 67. Eight turbines are proposed to be constructed on land leased from private landowners, with the other five turbines to be installed on County property. Monarch Wind Power has completed a wind study that uses two years of site-specific data and provides estimates of renewable energy generation for various turbines, as well as an avian/environmental study. The entire 20MW facility will be interconnected to an Ameren 69kv distribution line that runs along Route 67. The line bifurcates the site.

The turbines will be located on active agricultural fields. The five parcels are flat in topography and are undeveloped aside from agricultural uses. No structures or buildings are present at the proposed locations. The existing vegetation consists completely of agricultural crops. No undeveloped areas containing non-agricultural vegetation are present within the project extents. According to the applicant, no wildlife preserves or natural areas are located in the vicinity of the proposed project, and no mapped wetland areas are depicted in the USGS map for the area. No listed floodplains are depicted in the FEMA Flood Insurance Rate Maps (FIRMs) for the project. The current site plan complies with the Warren County zoning statutes for wind energy systems, and Monarch's land leases comply with the County's decommissioning statute. A County side road runs the depth of the County property and all the other turbine sites are close to existing roads, with most of them within easy access to Route 67 itself. With some upgrading and culverts, all the turbine sites will be easily accessible with a minimal amount of roadwork. The County will handle most of the construction and erection permits in compliance with its Wind Ordinance.

The project description and area covered was submitted to the on-line service EcoCAT of the Illinois Department of Natural Resources (DNR). The report generated indicated no state-listed threatened or endangered species and no Illinois Nature Preserves or registered Land and Water Reserves in the vicinity of the project location. Further consultation with the Illinois DNR indicates that migratory birds and bats will be the principal concern with the proposed project. Also of possible concern is the nearby prairie remnant that was originally established for a relict population of Massasauga rattlesnakes.

The impact of wind turbines on birds and bats is the most significant area for potential concern. The proposed Monarch wind facility lies within the Mississippi migratory flyway and as such has the potential to intercept migrants during inclement weather or when birds are landing or taking off. However, because the sites are not located near any significant habitat such as ponds, lakes or large forested tracts that would be sought by resting migrants, it is believed the potential for collision with turbines while ascending or descending is probably very low. Thus, inclement weather forcing birds to migrate at lower altitudes would carry the most potential for causing mortality.

Although studies of bird and bat mortality at wind facilities is in its infancy, recent studies have shown that bats are more at risk than birds. At the time of the EcoCAT study, no endangered bats had been recorded in Warren County and the intensively farmed area reduces the likelihood of any roosting sites. Although the EcoCAT report is a good first step in assessing wildlife impact, a pre-construction survey for breeding birds should be conducted. The survey is recommended for the June timeframe and to last for a minimum of two weeks.

Finally, the size of the wind towers will require FAA review and permitting. There are no airports in the immediate area, but a municipal airport is in the vicinity.

The sheer size of the project (i.e., 13 399ft tall wind turbines spread over 750 acres) raises the potential for public concern and environmental impact. Similarly, the nature of the project does not lend itself to any listed categorical exclusion applicable to general agency actions. As a result, an EA is recommended. In review of the environmental studies already completed, there is little reason to suspect that the project will require an EIS.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

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:

Construction of the Monarch Warren County Turbine Wind Farm. An Environmental Assessment must be completed and approved by DOE prior to initiating construction of the facility.

This restriction does not preclude you from:

Performing work to collect information and generate data required for the Environmental Assessment including, but not limited to, conducting environmental studies and public meetings in regard to the proposed project.

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:

Submit an Environmental Assessment to the Golden Field Office. A Finding of No Significant Impact (FONSI) is required before funds will be release for construction of the facility.

Note to Specialist :

According the the Project Officer, \$30,000 should be made available to the State and Applicant to support completion of the Environmental Assessment (EA). Additional funds are to be withheld pending review of the EA and issuance of a FONSI.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: 3/17/2010

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: 5-13-10