

# **NOTICE OF SCOPING**

The U.S. Department of Energy (DOE) is requesting public input on the scope of environmental issues and alternatives to be addressed in the:

## Environmental Assessment Kansas State Univ. Zond Wind Energy Project Manhattan, Kansas

The U.S. Department of Energy (DOE) is proposing to authorize the expenditure of federal funding to Kansas State University (KSU) to refurbish, install, operate, and maintain a 750-kilowatt Zond wind turbine on KSU property north of Manhattan, Kansas. An Environmental Assessment (EA) will be prepared by DOE pursuant to the requirements of the National Environmental Policy Act (NEPA). The notice of scoping and description of the proposed project is available for review at the DOE Electronic Public Reading Room at:

## http://www.eere.energy.gov/golden/NEPA\_DEA.aspx

Public comments on the NEPA process, proposed action and alternatives, and environmental issues will be accepted until **December 7, 2012**. Please send comments to Laura Margason, NEPA Document Manager, 1617 Cole Blvd, Golden, CO 80401 or via email to <u>laura.margason@go.doe.gov</u>.



## **Department of Energy**

Golden Field Office 1617 Cole Boulevard Golden, Colorado 80401-3393

November 8, 2012

## TO: Distribution List

SUBJECT: Notice of Scoping - Kansas State University Zond Wind Energy Project

The U.S. Department of Energy (DOE) is proposing to provide Congressionally Directed Federal Funding to Kansas State University (KSU) to refurbish, install, operate, and maintain a 750-kilowatt (kW) wind turbine on KSU property north of Manhattan, Kansas. Pursuant to the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021), DOE is preparing a draft Environmental Assessment (EA) to:

- Identify any adverse environmental effects that cannot be avoided should this proposed action be implemented.
- Evaluate viable alternatives to the proposed action, including a no action alternative.
- Describe the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity.
- Characterize any irreversible and irretrievable commitments of resources that would be involved should this proposed action be implemented.

### **Project Description**

A Zond Z-50 model wind turbine was donated to KSU to be used for education, research, and energy production. The proposed project involves refurbishing the turbine for use and installing it on KSU property north of the main campus. The Zond tower is 164 feet (50 meters) tall and each blade is 82 feet (25 meters) long for a total blade height of 246 feet (75 meters). A concrete pad approximately 40 feet square by 8 feet deep would be constructed for the turbine foundation.

A transformer would be installed near the base of the turbine and an electrical distribution line would connect the transformer to the electrical grid at the nearby Westar Energy substation. The distribution line would be installed underground for the entire distance between the substation and turbine, or would be on above ground poles for most of the distance and then placed underground as it approached the transformer. The length of the distribution line would be approximately 1,000 feet. An existing gravel road would be reinforced with additional gravel and be lengthened by approximately 200 feet to access the proposed site to install the turbine.

After installation, the KSU Department of Electrical and Computer Engineering would conduct different research projects with University students. When not used for research and education, the turbine would generate electricity that would be relayed to the grid and Westar Energy would directly reduce KSU's electricity consumption costs.

#### Project Location

The proposed location for the wind turbine is on KSU property approximately 3 miles north of the main campus in Manhattan, Kansas (Figure 1). The turbine would be located outside the city limits of Manhattan in the southeast quarter of Section 25, Township 9 North, Range 7 East of the 6th Principle Meridian in Riley County. The proposed site is located on the knoll north of Purcell Road and west of U.S. Highway 24 (Tuttle Creek Boulevard) as shown on Figure 2. The approximate layout of the site is shown on an aerial photo in Figure 3.

#### Environmental Review and Analysis

The EA will describe the environmental resources potentially affected by the project and assess the direct, indirect, and cumulative impacts on those resources from installing and operating the wind turbine. Mitigation measures to minimize or eliminate any impacts will be identified. The EA will evaluate potential impacts that may result from the project related to:

- Biological Resources
- Noise
- Cultural and Historic Resources
  Socioeconomics/Environmental Justice
- Health and Safety

Visual Quality and Aesthetics

#### Alternatives

In the NEPA process, DOE is required to consider a reasonable range of alternatives to the proposed project. The EA considers alternatives that could accomplish the agency's purpose and need and reduce environmental effects. Reasonable alternatives are those that are feasible to implement based on environmental, technical, and economic factors.

A reasonable alternative to the proposed project is to take no action and therefore a No Action Alternative will be assessed in the EA. The need for project redesign or a project alternative will be determined during the course of the environmental review.

#### Scoping

This letter will be available to interested state, local, and federal agencies and members of the public to provide input on issues to be considered in the scope of the environmental review. Agencies are invited to identify issues within their statutory responsibilities that should be considered in the EA. Comments on the issues, scope, and content of the EA should be submitted on or before **December 7, 2012** to:

Laura Margason Department of Energy Golden Field Office 1617 Cole Boulevard Golden, CO 80401

#### laura.margason@go.doe.gov

This letter and the draft EA, when available, will be posted to the Golden Field Office electronic reading room at: http://www.eere.energy.gov/golden/NEPA\_DEA.aspx .

Thank you for your interest and participation in the NEPA process.

Sincerely,

Laura Margason VEPA Document Manager

Attachments:

Figure 1 – Project Location Figure 2 – Aerial Location of Project Site Figure 3 – Site Layout



Figure 1 – Project Location



Figure 2 – Aerial Location of Project Site



Figure 3 – Site Layout (Approximate)