

**U.S. Department of Energy Office of Legacy Management
National Environmental Policy Act Environmental Checklist**

Project/Activity: Install demonstration wind turbine at Weldon Spring, MO, Site

A. Brief Project/Activity Description

The U.S. Department of Energy Office of Legacy Management proposes to install a small (6 to 9 feet [ft] diameter) wind turbine near the Interpretive Center on the Weldon Spring Site. The wind turbine would be pole-mounted with a final height of 20 to 30 ft above the ground surface. The turbine would be considered a small demonstration project to show the public practical home use of wind energy, and it would also correlate with a larger permanent renewable energy display within the Interpretive Center. The wind turbine is expected to produce enough energy to run the lights for the renewable energy display.

The turbine would be located in an area previously disturbed by construction of the building housing the Interpretive Center. No protected resources are present or would be affected by the presence of the wind turbine. The location of the turbine near the Interpretive Center and the size of the wind turbine would preclude bird collisions that are often associated with larger turbines located on cliffs with updrafts used by raptors. Installation of the turbine is expected to take four to five days, and a maximum of a 10-square-foot (ft²) area of previously disturbed soils would be affected by the installation. In addition, a 2-ft-deep and 18-inch-wide trench that would carry conduit an estimated 100-ft would be excavated from the wind turbine to the Interpretive Center.

A small skidster would be used to make the hole and dig the trench. All disturbed areas would be restored after the wind turbine and conduit to the Interpretive Center were installed. The type of wind turbine that would be used has a 30 decibels (dB) noise rating at ground level. A 30 dB rating would be similar to the noise level considered a 'whisper' in a library.

The Weldon Spring Site remediation was conducted in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Wind turbines were not considered or evaluated under the terms of Weldon Spring's Record of Decision and are therefore considered for NEPA values in this checklist.

B. Environmental Concerns

Evaluate the following elements and indicate by checking "yes" or "no" if any phase of the project/activity would result in a change or impact that is subject to regulatory permits, controls, or plans or that would require additional evaluation. If the "yes" column is checked, provide a brief explanation below and attach sheets with additional detail as necessary or appropriate.

Element	Yes	No	Element	Yes	No
Air emissions/air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Exposure/impacts to public or workers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Need for public awareness/involvement	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid waste generation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Transportation/traffic control required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mixed waste management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Access to/use of DOE property	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chemical storage on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Visual resources impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pesticide/herbicide use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cultural/archaeology resources present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Toxic substances management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wetland/floodplain impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Regulated quantities of petroleum used or stored on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Protected species present: federal, state, or tribe listed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Radioactive materials/soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Migratory birds breeding or nesting	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface (ground) disturbance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Wild/scenic rivers impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Element	Yes	No	Element	Yes	No
Surface water use/contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Prime/unique farmlands present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface water quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Groundwater use/contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Groundwater quality affected	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other considerations	<input type="checkbox"/>	<input checked="" type="checkbox"/>

C. Explanation and Qualification of All "Yes" Responses

Air emissions/air quality: Minor amounts of fugitive dust may be associated with excavation activities. The short duration of the construction and installation actions and the nature of the soils that would be disturbed are not expected to result in fugitive dust that would need management.

Noise: Minor temporary noise would be associated with the use of a skidster and likely use of a crane to lift the pole into place. The noise associated with the working wind turbine would be negligible.

Surface (ground) disturbance: Installing the wind turbine and excavating a trench to carry conduit to the Interpretive Center would result in temporary ground disturbance of the existing grass surface. After installation is complete, disturbed areas would be seeded.

D. Eligibility/Conditions

The proposed action fits within a class of actions listed in Appendix A or B to Subpart D of Title 10 *Code of Federal Regulations* Part 1021 (10 CFR 1021). DOE has determined that these classes of actions do not individually or cumulatively have a significant effect on the human environment (see 10 CFR 1021.410). No extraordinary circumstances are related to the proposed action that may affect the significance of the environmental effects of the proposed action, and the proposed action is not "connected" to other actions with potentially significant impacts. Finally, the action is not related to other proposed actions with cumulatively significant impacts and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

E. Recommendation

The proposed action of installing a small demonstration wind turbine would be considered categorically excluded from further environmental evaluation under 10 CFR 1021, Appendix B to Subpart D, B5.1 "Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentration of potentially harmful substances."

- Meets Criteria Does Not Meet Criteria Unsure

F. NEPA Determination

The scope of actions proposed under Section A of this Environmental Checklist, and the information relevant to the potential for environmental impacts in Section B have been reviewed, and the following has been determined:

- The proposed actions meet the criteria for categorical exclusion.
- The proposed actions do not meet the criteria for categorical exclusion; therefore, I recommend that the LM NEPA Planning Board be convened based on my recommendation (see attached rationale) to complete:
 - an Interim Action an Environmental Assessment
 - an Environmental Impact Statement a Supplemental Analysis

Concurrences

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LM Site Name Weldon Spring	LM Site Program CERCLA/RCRA Sites	
Contractor NEPA Coordinator Sandy Beranich	Signature <i>Sandra Beranich</i> 2010.04.15 11:33:02 -06'00'	Date
Contractor Site Manager Yvonne Deyo	Signature <i>Yvonne E. Deyo</i> 2010.04.19 12:09:32 -05'00'	Date
LM Site Manager Jane Powell	Signature <i>Jane Powell</i> Jane Powell 2010.04.26 11:01:09 -04'00'	Date
LM NEPA Compliance Officer Richard Bush	Signature <i>Richard Bush</i>	Date 4/26/10

Distribution upon signature:

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