



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MAY 21 2013

John Hayse
Western/FWS Draft Wind Energy PEIS
Argonne National Laboratory
9700 S. Cass Avenue – EVS/240
Argonne, IL 60439

Dear Mr. Hayse:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the Department of Energy, Western Area Power Administration (Western) and the U.S. Department of Interior, Fish and Wildlife Service's (Service) Upper Great Plains Wind Energy Draft Programmatic Environmental Impact Statement (PEIS) (CEQ # 20130070). To better address environmental concerns associated with increased development of wind energy production, Western and the Service are considering the implementation of environmental evaluation procedures and mitigation strategies for wind development projects in Western's Upper Great Plains (UGP) Customer Service Region.

Based on our review, EPA has no objections to the proposed action and we have rated the draft PEIS as "Lack of Objections" (LO) (see enclosed "Summary of EPA Rating System"). We do have comments for your consideration based on EPA's ongoing efforts to seek opportunities to facilitate the reuse of contaminated properties for renewable energy projects, and we also offer comments/suggestions regarding the discussions about best management practices, mitigation, and monitoring.

We appreciate the opportunity to review the draft PEIS. The staff contact for the review is Marthea Rountree and she can be reached at (202) 564-7141.

Sincerely,

A handwritten signature in black ink that reads "Susan E Bromm". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Susan E. Bromm
Director
Office of Federal Activities

Enclosures (2): Detailed Comments
Summary of EPA Rating System

**Upper Great Plains Wind Energy
Programmatic Environmental Impact Statement
EPA Detailed Comments**

Highlighting Contaminated Lands and Mine Sites

EPA encourages Western and the Service to highlight the potential of these sites in the final PEIS. Current references to contaminated sites are linked to construction and liability considerations (3.9.5 Existing Contamination). However, these sites represent a unique opportunity for future wind development given historic uses. To this end, EPA recommends adding the second paragraph below to encourage this reuse opportunity and providing a list of identified potential sites as an appendix to the PEIS:

3.9.5 Existing Contamination It is possible that wind energy projects would be proposed for areas at which other industrial activities had previously taken place (or are ongoing). In those situations, industrial contamination may be encountered during site development, especially during foundation and cable trench excavations. Once identified, all such contamination would need to be characterized, and a separate plan to remove contamination or stabilize it in place would need to be developed. Additional agreements may be needed to negotiate specific responsibilities for characterizing and remediating contamination.

Due to historical uses, potentially or formerly contaminated lands or mine sites may present unique opportunities for wind energy redevelopment. Potential advantages may include, but are not limited to, leveraging existing utility and transportation infrastructure, mitigating impacts on open space, and reducing land costs. To date, US EPA has identified seven (7) wind energy projects (with a cumulative capacity of 55 MW) installed on these types of sites, including the 35-MW Steel Winds project (NY) at a former steel mill site and the 16.5-MW Chevron Casper Wind Farm (WY) at a former refinery site. These projects may serve as models for future development at contaminated lands and mine sites identified by the EPA's RE-Powering America's Land Initiative or other State cleanup programs in the Upper Great Plains service territory.

As part of the RE-Powering Initiative, EPA has pre-screened 220 contaminated sites, landfills or mine sites in the Upper Great Plain Wind Energy study area, using criteria developed in collaboration with DOE's National Renewable Energy Laboratory (NREL) (below). The EPA-NREL screening uses:

- Site location and acreage information from EPA
- 50-m and 80-m wind data from NREL
- Infrastructure location data from Dept of Homeland Security

	Estimated RE Project Capacity Range	Renewable Energy Resource Availability	Acreage (acres)	Distance to Transmission (miles)	Distance to Graded Roads (miles)		# Sites with Positive Screening Results	Estimated Capacity
Utility scale	> 20 MW	5.5 m/s at 80 m	≥ 100	≤ 10	≤ 10		63	> 1,260 MW
Large scale	> 10 MW	5.5 m/s at 80 m	40 - 100	≤ 10	≤ 10		50	> 500 MW
1-2 Turbine sites	> 1 MW turbine	5.5 m/s at 80 m	≥ 2	≤ 1	≤ 1		185	185 – 370 MW

Based on preliminary screening, there are many contaminated sites with significant development potential for wind energy. Please see attached file (Western Wind Sites.xlsx) for more detailed information on the sites that met the criteria for utility scale, large scale and 1-2 turbine sites. This list includes potentially contaminated lands, landfills, and mine sites in the Upper Great Plains and flags those within the definite service territory (Column I). The associated map (study area.jpg) illustrates the location of these candidate sites within the geography of the study area. These screening results reflect updated criteria and wind energy resource data developed in collaboration with NREL. This update will be posted to the RE-Powering Mapping Tool website at: http://www.epa.gov/renewableenergyland/rd_mapping_tool.htm.

For sites with greater than 9,500 acres, as described in Section 5 Environmental Consequences, EPA identified the following sites with very large-scale development potential (> 75 utility-scale turbines).

SITENAME	CITY	ST	Wind Speed at 80 m (m/s)	ACRES
BASIN MINING AREA	BASIN	MT	6.50	50,013
HASTINGS GROUND WATER CONTAMINATION	HASTINGS	NE	8.00	48,907
UPPER TENMILE CREEK MINING AREA	HELENA	MT	7.50	33,920
DICKINSON ELKS BUILDING	DICKINSON	ND	8.00	28,174
CARPENTER SNOW CREEK MINING DISTRICT	NEIHART	MT	7.00	18,000
OMAHA LEAD	OMAHA	NE	7.00	16,576
CORNHUSKER ARMY AMMUNITION PLANT	GRAND ISLAND	NE	8.00	11,936
BARKER HUGHESVILLE MINING DISTRICT	MONARCH	MT	8.00	9,670

Add Incentives to Further Encourage Redevelopment of Contaminated Lands

EPA recommends adopting incentives specific to contaminated lands, similar to those outlined in the DOE-BLM Solar Energy Zones PEIS. This approach highlights the potential and also provides incentives for developers to prioritize these lands.

Potential incentives for land revitalization may include:

- Facilitating Streamlined Permitting:
 - Where applicable, permitting review may take into account historical data collection and environmental review associated with historical activities at a potentially or formerly contaminated site to assess, investigate, and respond to contamination.

- If applicable, documentation that the proposed project will be located in, or adjacent to, previously contaminated or disturbed lands such as brownfields identified by the EPA's RE-Powering America's Land Initiative (<http://www.epa.gov/renewableenergyland>) or a State cleanup program; mechanically altered lands such as mine-scarred lands and fallowed agricultural lands; idle or underutilized industrial areas; lands adjacent to urbanized areas and/or load centers; or areas repeatedly burned and invaded by fire-promoting non-native grasses where the probability of restoration is determined to be limited.
- Environmental Mitigation: Where applicable, remediation activities to address contamination at a site will be considered in reviewing the overall environmental impact of the wind energy development at a given site.

Best Management Practices

According to the draft PEIS, the obligation to decommission the facility and perform reclamation as required by the landowners and appropriate land management agencies or jurisdictional authorities. EPA recommends the final PEIS include examples of BMPs typically used for this type of project. This information would provide the decision makers a better understanding of the actions that could be employed to reduce impacts.

Mitigation and Monitoring

We recommend that the final PEIS include additional information about how Western and the Service will ensure implementation and monitoring of BMPs. We also recommend that the PEIS identify responsible entities and schedules for monitoring compliance. Examples of contractual agreements or a description of how the contracting strategy would ensure full implementation of all BMPs and mitigation measures associated with the ROD's selected alternative could be an effective means of disclosure.

Financial Assurance

The draft PEIS indicates the typical life of a wind park in the UGP will most likely be 20-30 years. An obligation to decommission the facility and perform reclamation as required by the landowners and appropriate land management agencies or jurisdictional authorities was discussed in detail. However, no information regarding financial assurance for decommissioning and reclamation was identified. EPA recommends that the final PEIS include financial assurance strategies for decommissioning and reclamation. The projected lifespan should be used to ascertain the correct financial instruments and project future rates of decommissioning that could be used for financial assurance calculations.

SUMMARY OF EPA RATING SYSTEM

Rating the Environmental Impact of the Action

- **LO (Lack of Objections)** The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.
- **EC (Environmental Concerns)** The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.
- **EO (Environmental Objections)** The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:
 1. *Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;*
 2. *Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;*
 3. *Where there is a violation of an EPA policy declaration;*
 4. *Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or*
 5. *Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.*
- **EU (Environmentally Unsatisfactory)** The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:
 1. *The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;*
 2. *There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or*
 3. *The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.*

Adequacy of the Impact Statement

- **Category 1 (Adequate)** The draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- **Category 2 (Insufficient Information)** The draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the final EIS.
- **Category 3 (Inadequate)** The draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS.