

**FINDING OF NO SIGNIFICANT IMPACT
for the Palmer's Creek Wind Farm Project**

**Chippewa County, Minnesota
DOE/EA – 2053**

AGENCY: U.S. Department of Energy (DOE), Western Area Power Administration (WAPA)

ACTION: Adoption of Environmental Assessment (EA), issuance of Finding of No Significant Impact (FONSI), and selection of Proposed Action for implementation.

SUMMARY: Palmer's Creek Wind Farm, LLC (Palmer's Creek) has proposed to construct the Palmer's Creek Wind Farm (Project), a Large Wind Energy Conversion System, with a 44.6-megawatt (MW) nameplate capacity in Chippewa County, Minnesota. The Project consists of 18 wind turbines located on approximately 6,150 acres of privately owned land. The Project would also include associated access roads, a new collector substation, an operations and maintenance facility, and associated transmission interconnection facilities. Palmer's Creek further proposes to interconnect the Project to an existing Western Area Power Administration (WAPA) substation, the Granite Falls Substation, which is within the project area boundary. The Project and proposed interconnection are collectively referred to as the Proposed Action.

Palmer's Creek prepared an Environmental Assessment (EA) (*Palmer's Creek Wind Farm Final Environmental Assessment, DOE/EA-2053*) to analyze the potential environmental impacts of the Proposed Action. The EA tiered from the analysis conducted in the Upper Great Plains Wind Energy Final Programmatic Environmental Impact Statement (PEIS), a document prepared jointly by WAPA and the U.S. Fish and Wildlife Service (USFWS)(2015). Applicable material from the PEIS was incorporated by reference in the EA, in accordance with 40 Code of Federal Regulations (CFR) §§ 1502.20 and 1508.28. The EA was intended to be read in conjunction with the PEIS, and the EA and PEIS together comprise the NEPA documentation for this Federal action.

WAPA independently reviewed the EA and determined it met DOE NEPA standards. The EA included an assessment of the environmental effects of the individual actions which WAPA has jurisdiction over, as well as an analysis and disclosure of the potential environmental impacts of the Palmer's Creek Wind Farm Project.

FOR FURTHER INFORMATION, CONTACT: A copy of all associated NEPA documents are available at the following website:

<https://www.wapa.gov/regions/UGP/Environment/Pages/environment.aspx>. For additional information, please contact:

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PROPOSED ACTION: Palmer's Creek's Proposed Action is to construct the Palmer's Creek Wind Farm (Project), including the following components:

- Two (2) 2.3-MW and sixteen (16) 2.5-MW wind turbines with an aggregate nameplate capacity of 44.6 MW,
- Underground electric collector lines,
- New central collector substation (Palmer's Creek Substation),
- Approximately 1000-foot long transmission line interconnecting to the Granite Falls Substation,
- O&M facility,
- Access roads connecting to each turbine,
- One permanent meteorological tower,
- Supervisory control and data acquisition system, and
- Temporary laydown yard.

WAPA's Proposed Action is to execute an interconnection agreement between WAPA and Palmer's Creek, in accordance with the Southwest Power Pool Tariff and the Federal Power Act, as well as perform any necessary upgrades within the Granite Falls Substation to accommodate the Project power.

ALTERNATIVES: DOE's NEPA regulations require that EAs include a "No Action" alternative (10 CFR §1021.321(c)). The EA presented a "No Action" alternative, which assumed the project would not be constructed.

PUBLIC INVOLVEMENT: Throughout the course of the project, there were substantial opportunities for public involvement. Public involvement began with a scoping meeting, held on December 1, 2016, in Granite Falls, Minnesota. The scoping meeting was advertised through newspaper and radio announcements, a project website, and individual letters to agencies, tribes, and residents near the Project. WAPA circulated the draft EA for public review and comment on October 12, 2017. Comments on the draft EA were accepted through November 15, 2017. Public involvement documentation is included in Appendix I of the EA. A summary of comments received and responses is included in Appendix J of the EA.

Agency coordination with Federal, State and local governments was initiated in 2016 and continues to the present day. Agencies contacted include:

- Federal Aviation Administration
- USFWS
- U.S. Department of Agriculture, Natural Resource Conservation Service and Rural Utilities Service
- Federal Emergency Management Agency
- Federal Highway Administration
- U.S. Army Corps of Engineers
- Bureau of Land Management
- Bureau of Indian Affairs
- Minnesota Department of Transportation
- Minnesota Department of Natural Resources
- Minnesota Public Utilities Commission
- Minnesota State Historic Preservation Office
- Minnesota Office of the Governor

- Minnesota Indian Affairs Council
- Minnesota Department of Commerce
- Upper Minnesota Regional Development Commission
- Chippewa County – Commissioners, Highway Department, Land and Resource Management, Emergency Management Departments
- City of Granite Falls
- Minnesota and Chippewa County Soil and Water Conservation Districts

Tribal coordination was initiated with several American Indian Tribes, beginning on November 10, 2016 and continuing to the present day. The tribal parties that were consulted regarding the Project were:

- Cheyenne and Arapaho Tribes of Oklahoma
- Flandreau Santee Sioux Tribe
- Santee Sioux Nation
- Lower Sioux Indian Community
- Prairie Island Indian Community
- Spirit Lake Tribe
- Sisseton-Wahpeton Oyate Nation
- Upper Sioux Indian Community
- Iowa Tribe of Kansas and Nebraska
- Fort Belknap Indian Community
- Apache Tribe of Oklahoma
- Menominee Indian Tribe of Wisconsin.

The Upper Sioux Community and the Cheyenne and Arapaho Tribes of Oklahoma were the only tribes to respond to WAPA’s request for information and invitation for consultation. The Upper Sioux Community requested that staff from their Tribal Historic Preservation Office (THPO) be allowed to conduct a Tribal survey and the Cheyenne & Arapaho Tribes indicated they knew of no historic properties in the APE.

WAPA held one tribal consultation meeting on May 4, 2017, at the Prairie’s Edge Casino near Granite Falls, Minnesota. In addition to the consultation meeting, Upper Sioux Community THPO representatives completed two cultural resource investigations and all cultural resource reports provided to WAPA by Palmer’s Creek were submitted to the tribes for review and comment. No comments were received.

ENVIRONMENTAL IMPACTS: The EA disclosed the potential environmental impacts of the Proposed Action and No Action Alternatives.

Table 1: Summary of Environmental Impacts of Alternatives

<i>Resource Area</i>	<i>Impacts</i>	
	<i>Proposed Action Alternative</i>	<i>No Action Alternative</i>
Land Cover & Land Use	Temporary disturbance expected on 172 acres (0.03% of project area) of non-native lands. Disturbance will include soil/vegetation removal and re-seeding after construction. Permanent conversion of 12 acres (0.002% of project area) of agricultural land to non-agricultural uses.	Continuation of current impacts, at existing intensity.
Geology and Soils	Temporary soil disturbance (such as compaction, increased erosion) expected on 172 acres. Permanent disturbance to 12	Continuation of current impacts, at existing intensity.

	acres of soils, including soil compaction, excavation, and mixing of soil layers.	
Water Resources	<p>Avoidance of water resources by siting permanent features in non-water areas whenever feasible, and using horizontal boring when infeasible to avoid. Project is outside of the County Designated Flood Zone and Wild and Scenic River regulatory area; no impacts to these resources are anticipated.</p> <p>Indirect impacts, such as changes in runoff patterns or volume of runoff, impacts to groundwater or nearby aquifers, or contamination of water resources could occur.</p>	Continuation of current impacts, at existing intensity.
Air Quality and Climate	Temporary increase in local emissions during construction. Wind power could displace fossil-fueled electrical generation.	Continuation of current impacts, at existing intensity.
Noise	<p>There are 49 potential noise receptors within the project area (47 residences, one historic farmstead, and the WAPA substation). Construction and operation of the Project is expected to increase noise levels by as much as 2.8 A-weighted decibels (dBA). Construction noise will be temporary and limited to daylight hours.</p> <p>Project operation is expected to increase noise levels by as much as 3.1 dBA at some receptors. Changes in sound levels less than 3 dBA are barely perceptible to the human year.</p>	Continuation of current impacts, at existing intensity.
Ecological – Plant Communities	<p>Temporary clearing of 162 acres of agricultural land (cultivated crops, pasture/hay land). Temporary impacts to an additional 10 acres of non-agricultural land (including 1 acre of wetland and 1 acre of forest).</p> <p>Permanent conversion of 2 acres of non-agricultural, non-native vegetation and 10 acres of cultivated crops into developed areas.</p>	Continuation of current impacts, at existing intensity.

Ecological - Wildlife	<p>A temporary increase in wildlife avoidance throughout the project area is expected during construction.</p> <p>Conversion of undeveloped land into project facilities will result in a permanent loss of 12 acres of seasonal foraging and short-term shelter habitat.</p>	Continuation of current impacts, at existing intensity.
Ecological - Birds	<p>Construction and operation of Project facilities will likely increase bird collisions and mortality, as well as increase displacement, habitat fragmentation, and habitat loss.</p> <p>The Project will result in an avian fatality rate between 0.44 – 11.83 birds/turbine/year (0.49 – 7.17birds/MW/year).</p> <p>The estimated bald eagle fatalities per year is approximately 0.03 and less than 5 percent of the estimated local population of eagles near the project area. Over the estimated 30-year project life, this equates to 3 eagle fatalities.</p>	Continuation of current impacts, at existing intensity.
Ecological - Bats	<p>The mean bat mortality rate is 9.6 bats per turbine, per year. For the 18 turbine Project, this equates to 173 bat mortalities per year. Bat mortality is likely to be greatest for migratory tree bat species, including hoary, eastern red and silver-haired bats during the fall migration period.</p>	Continuation of current impacts, at existing intensity.
Ecological – Aquatic Biota/Habitats	<p>Impacts to wetlands and streams would be avoided by siting facilities away from aquatic resources and implementing Storm Water and Pollution Prevention Plan and other conservation requirements.</p>	Continuation of current impacts, at existing intensity.
Threatened and Endangered Species	<p>WAPA determined the Project <i>may affect, not likely to adversely effect</i>, federally-listed species (Dakota skipper, Poweshiek skipperling, and Northern long-eared bat). The USFWS concurred with WAPA’s determination in February 2018.</p>	Continuation of current impacts, at existing intensity.

	The Project would not adversely impact populations of state-listed bird species or state-listed bats or snakes.	
Visual Resources	The project will have limited visual effect on Granite Falls. Up to 15 wind turbines will be visible from the east side of the Upper Sioux Reservation. Turbines will be visible to travelers along CR 15 and the Minnesota River Valley National Science Byway alternate routes, but will have a limited visual effect on U.S. Hwy 212. Substantial visual impacts to the Byway are not anticipated relative to the existing transmission lines, substations, and other visible infrastructure in the area.	Continuation of current impacts, at existing intensity.
Paleontological Resources	Construction of turbine and substation foundations could impact fossil-bearing formations, but based upon the geologic formations in the area, the risk to impact paleontological resources is very low.	Continuation of current impacts, at existing intensity.
Cultural Resources	<p>The Upper Sioux Community THPO identified three areas of concern. Palmer's Creek agreed to shift project facilities away from these locations. One project facility could not be shifted due to the limiting topography, so an agreement was reached to have tribal monitors at this location during construction.</p> <p>The Upper Sioux Community THPO completed another cultural resource investigation in the spring of 2018 and no tribal cultural properties were identified.</p> <p>WAPA determined the Project would not adversely affect historic resources and the Minnesota State Historic Preservation Office (SHPO) concurred with this determination on July 19th, 2018.</p>	Continuation of current impacts, at existing intensity.
Socioeconomics	<p>The Project will result in the creation of roughly 100 short-term construction jobs and five long-term jobs.</p> <p>Operation of the Project will create long-term beneficial impacts to Chippewa County's tax base and tax revenues.</p>	Continuation of current impacts, at existing intensity.

	<p>Participating landowners would also receive a direct economic benefit.</p> <p>There is no broadly accepted evidence that wind turbines impact property values.</p>	
Environmental Justice	<p>The Upper Sioux Community is a minority population located 5 miles south of the project area, however, these populations will not experience adverse or disproportionate effects as a result of the project.</p>	<p>Continuation of current impacts, at existing intensity.</p>
Hazardous Materials and Health and Safety	<p>Small quantities of lubricants and other potentially hazardous materials are necessary for proper equipment operation of the Project. These materials will be stored at the maintenance facility and contained within the equipment itself. Spills or exposure could occur during routine equipment servicing.</p> <p>The Project is not at an unusual risk for accidents or acts of sabotage or terrorism.</p> <p>The Project will not cause impacts to the Granite Falls Municipal Airport/Lenzen-Roe-Fagen Memorial Field or the Montevideo-Chippewa County Airport.</p>	<p>Continuation of current impacts, at existing intensity.</p>
Cumulative Impacts	<p>Considering the present and reasonably foreseeable future activities and their limited impact, and considering the impact avoidance, minimization, and mitigation commitments, adverse cumulative impacts will not be significant.</p>	<p>Continuation of present and future activities and associated impacts, at existing intensity.</p>

ENVIRONMENTAL COMMITMENTS:

Environmental commitments have been embedded as a required component of the Proposed Action alternative and are listed in Appendix G of the EA.

FINDING: WAPA evaluated the potential environmental impacts at a variety of contexts, including national, regional, and local scales, and intensities. WAPA identified no significant impacts to environmental resources or the human environment, either individually or cumulatively with other actions in the general area, which would result from the Palmer’s Creek Wind Project, including WAPA’s federal actions.

The principal reason for the lack of significant environmental impacts is the use of avoidance measures and environmental commitments as a required component of the project. Additionally:

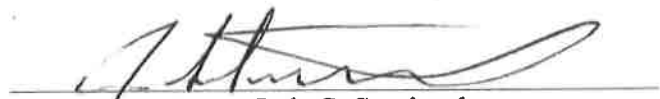
- Only underground project components will cross Conservation Reserve Enhancement Program land and no permanent impacts will occur.
- Reinvest in Minnesota Reserve and Permanent Wetland Preserve easements are located outside of the project area and will not be disturbed.
- The Project will have limited visual effect on the Minnesota River Valley National Scenic Byway relative to the existing transmission lines, substations, and other visible infrastructure in the area.
- The Spartan and Sween Wildlife Management Areas (WMA) border the project area to the southwest and north, respectively. The Spartan WMA contains rare wetlands but is located outside of the project boundary and will not be disturbed.
- Although turbine-related bird fatalities are anticipated, the fatalities are not expected to have population-level impacts due to the low frequency of occurrence within the project area.
- The Minnesota River is designated as a State Wild and Scenic River, but the Project will occur outside of the regulatory area.
- Dry Hill Prairie (native prairie) occurs in several narrow areas along the western portion of the project area but facilities have been sited outside of native prairie areas.
- The western portion of the project overlaps with the Upper Minnesota River Valley Important Bird Area (IBA), which poses a risk for birds to collide with turbines. Project construction will occur outside of the IBA and Palmer's Creek has committed to implementing adaptive management strategies and shifting turbine placement to minimize impacts.
- While some political controversy exists over the impacts of low-frequency noise on the human environment and the impacts of wind turbines on surrounding land values, no scientific controversy (conflicting scientific data or reports) was presented. The EA identified no highly controversial, unique, or unknown effects on the quality of the human environment or public health or safety.
- The project is not unique or unusual and does not establish a precedent for future actions.
- Consultation with SHPO has been completed in accordance with Section 106 of the National Historic Preservation Act and concurrence was received on WAPA's determination of "no adverse affect."
- Consultation with the USFWS was completed in accordance with Section 7 of the Endangered Species Act and concurrence was received on WAPA's determinations of "may affect, not likely to adversely affect."
- The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process.

Because WAPA has found the Project to not constitute a major Federal action significantly affecting the quality of the human environment, a Finding of No Significant Impact (FONSI) is warranted and an environmental impact statement will not be prepared. This FONSI was prepared in accordance with *Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR §1508.13) and the DOE NEPA Implementing Procedures (10 CFR §1021.322).

DECISION:

WAPA has decided to adopt the EA, hereafter referred to as DOE/EA-2053, and issue this FONSI. WAPA has selected the Proposed Action Alternative, including all applicable avoidance and minimization measures described in DOE/EA-2053, for implementation.

Issued at Billings, Montana on July 26, 2018



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Senior Vice President and UGP Regional Manager

