

RECORD OF DECISION

for the
Proposed Issuance of a Section 10(a)(1)(B) Incidental Take Permit

to

Fowler Ridge

for the

Fowler Ridge Wind Farm Habitat Conservation Plan

U.S. Fish and Wildlife Service

March 11, 2014

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Introduction

This Record of Decision (ROD) was prepared by the U.S. Fish and Wildlife Service (Service) in compliance with to the National Environmental Policy Act of 1969, as amended (NEPA). The purpose of this ROD is to document the decision of the Service in response to an application for an Incidental Take Permit (Permit) (TE95012A) for the take of species listed under the Endangered Species Act of 1973, as amended (Act). The Service has based its decision on the draft Habitat Conservation Plan (DHCP), the final Habitat Conservation Plan (FHCP), the draft Environmental Impact Statement (DEIS), the final Environmental Impact Statement (FEIS), the Implementing Agreement (IA), the Statement of Findings, and the Biological Opinion (BO). Fowler Ridge Wind Farm LLC, Fowler Ridge II Wind Farm LLC, Fowler Ridge III Wind Farm LLC, and Fowler Ridge IV Wind Farm LLC, collectively referred to as Fowler Ridge (Applicant), submitted a Permit application and supporting HCP and IA to the Service pursuant to section 10(a)(1)(B) of the Act.

This ROD: (1) documents the Service decision and presents the rationale for the decision; (2) identifies the alternatives considered in the Environmental Impact Statement (EIS) in reaching the decision; and (3) states whether all practicable means to avoid and minimize environmental harm from the alternative selected have been adopted, and if not, why they were not (40 CFR§ 1505.2).

The Service proposes to issue a Permit to the Applicant under the authority of section 10(a)(1)(B) and section 10(a)(2) of the Act for a period of 21 years. Documents used in the preparation of this ROD include the following:

- Draft Fowler Ridge Wind Farm Habitat Conservation Plan (HCP) (Fowler Ridge 2013a)
- Final Fowler Ridge Wind Farm Habitat Conservation Plan (HCP) Fowler Ridge 2013b)
- Draft Environmental Impact Statement for the Fowler Ridge Wind Farm Habitat Conservation Plan (DEIS) (Service 2013a),
- Final Environmental Impact Statement for the Fowler Ridge Farm Habitat Conservation Plan (FEIS) (Service 2013b),
- Final Implementing Agreement (IA),
- Service's Biological Opinion on the Permit application (Service 2014a), and
- Service's Statement of Findings on the Permit application (Service 2014b).

All of these documents are incorporated by reference.

Project Description

The Fowler Ridge Wind Farm facility (FRWF or Project) consists of four project phases owned by four separate Companies: Fowler Ridge Wind Farm LLC; Fowler Ridge II Wind Farm LLC; Fowler Ridge III Wind Farm LLC; and Fowler Ridge IV Wind Farm LLC. The four Companies, hereinafter referred to as Fowler Ridge or Permittees, will jointly serve as permittees under the ITP, and are jointly and severally liable for all obligations assigned to them under the ITP, HCP and associated documents such as the Implementing Agreement (IA) and Programmatic Agreement (PA).

The FRWF is being developed in four separate phases for a total of 750 MW (Table 2.1). The Project currently consists of 355 wind turbines in three phases (Phases I, II, and III) in western Indiana in Benton County near the Illinois state line. Up to an additional 94 turbines are currently planned for construction during Phase IV in 2014.

Purpose and Need

The purpose for the proposed action is to:

- Respond to Fowler Ridge's application for a Permit for the federally endangered Indiana bat related to Project activities that have the potential to result in take, pursuant to the provisions of Section 10(a)(1)(B) of the Act, and its implementing regulations (50 C.F.R. part 17.22(b)(1)) and policies.
- Protect, conserve and enhance the Indiana bat and its habitat for the continuing benefit of the people of the United States (U.S.).
- Provide a means and take steps to conserve the ecosystems depended on by the Indiana bat.
- Ensure the long-term survival of the Indiana bat through protection and management of the species and its habitat.
- Ensure compliance with the Act, NEPA, and other applicable Federal laws and Regulations

The need for the proposed action is based on the incidental take of two Indiana bats at the FRWF in 2009 and 2010 and the potential that future turbine operations could result in the additional incidental take of Indiana bats, and thus the need for a Permit. Commercial wind facilities have been shown to cause high numbers of bat mortalities in many locations. There is a need to ensure that take of Indiana bats is avoided and minimized to the maximum extent practicable and to ensure that the impact of any remaining take is fully mitigated to the maximum extent practicable.

Covered Activities

The activities (Covered Activities) that will be covered under the Permit are those activities associated with the operation of all four phases of the Project. Commercial operation of Phases I, II, and III was achieved in 2009. Phase IV is anticipated to begin operations in 2015. The first three phases include the operation of 355 turbines and phase IV will include the operation of up to an additional 94 turbines. In total the Project will operate up to 455 turbines for a period of 21 years in Benton County, Indiana.

Covered Lands

Phases I, II, and III are approximately 57,600 acres (23,310 hectares [ha]) in size with land cover primarily agriculture. All temporarily disturbed areas from construction of phases I, II, and III were restored to the previous agriculture type. Similar in land cover, Phase IV will be approximately 6,400 acres (2,590 ha) in size and all areas temporarily disturbed during construction of Phase IV will be restored to the previous agriculture type. All Project facilities will be located in Benton County, Indiana. The Project will not impact or change the existing land use which is primarily agriculture. Covered lands also include the areas within which mitigation actions will occur. Mitigation will involve preservation and restoration of maternity colony habitat in the vicinity of existing maternity colonies in Putnam County, Tippecanoe County, Vermillion County, or Warren County, Indiana. Protection of winter habitat will consist of installing a new bat gate near the entrance of a Priority 1 hibernaculum at Wyandotte Cave in Crawford County, Indiana.

Conservation Measures

The FHCP describes the impacts of take associated with the Applicant's Covered Activities and describes a number of measures to avoid, minimize or mitigate the adverse effects to the Indiana bat. Collectively these proposed actions reduce take of Indiana bats, restore and protect summer habitat, and restore a Priority 1 hibernaculum. These measures include:

1. Feathering the turbine blades up to a cut-in speed of 5.0 meters per second (m/s [11.2 miles per hour]) during the fall migration season, August 1 – October 15. Feathering involves changing the pitch of the turbine blades so that they are parallel to the wind and, therefore, are rotating very slowly, if at all. Previous studies at the FRWF and other facilities have shown that feathering turbine blades below a higher cut-in speed significantly reduces the number of bat fatalities. Based on data collected at FRWF, it is estimated that feathering turbine blades below 5.0 m/s wind speed will reduce bat fatalities by at least 50 percent from normal operation levels.
2. Restoring and permanently protecting 240 acres of summer habitat within the range of one or more extant maternity colonies. Lands targeted for protection and restoration will be at least 60 acre blocks within the home range of a maternity colony located in Putnam,

Tippecanoe, Vermillion, or Warren counties, Indiana (roughly equivalent to the local watershed of FRWF).

3. Re-gating of Wyandotte Cave, a Priority 1 hibernaculum located in Crawford County, Indiana. The new gate will protect approximately 10,000 vulnerable bats that hibernate in an area between the entrance to the cave and the current gate.

Alternatives

The EIS contains an analysis of four alternatives: (1) No Action alternative, in which all 449 turbines would be shut down (i.e., non-operational) from sunset to sunrise from August 1 through October 15; (2) 3.5 m/s Cut-In Speed (Feathered) Alternative; (3) 5.0 m/s Cut-In Speed (Feathered) Alternative; and (4) 6.5 m/s Cut-In Speed (Feathered) Alternative. The EIS considers the direct, indirect, and cumulative effects of the alternatives, including any measures under the Proposed Action alternative intended to minimize and mitigate such impacts. The EIS also identified five additional alternatives that were considered but were eliminated from consideration (detailed in Section 3.1.3 of the FEIS). Following is a brief description of the no-action alternative as well as the three action alternatives.

1. No Action Alternative

Under this alternative the Applicant would construct Phase IV and all 449 turbines would be shut down (i.e., non-operational) from sunset to sunrise from August 1 through October 15, each year during the operational life (21 years) of the Project. All impacts to the Indiana bat would be avoided and no Permit would be issued. In addition, no HCP would be prepared and the Indiana bat would not have the conservation benefits (mitigation) afforded to it through development and implementation of the HCP. Fowler Ridge would commit to implementing the Bird and Bat Conservation Strategy (BBCS) as part of this alternative to reduce the potential for impacts to migratory birds and bat species (Appendix D of the EIS).

2. 3.5 m/s Cut-in Speed (Feathered) Alternative

Under this alternative the HCP would be implemented and a Permit would be issued for the take of Indiana bat during the fall migration season (August 1 to October 15) at the three existing phases of the Project and the future phase IV. Fowler Ridge would commit to implementing the Bird and Bat Conservation Strategy (BBCS) as part of this alternative to reduce the potential for impacts to migratory birds and bat species (Appendix D of the EIS). Fowler Ridge would minimize potential take of Indiana bat from operation of the Project by adjusting the turbine operational parameters so that the rotation of the turbine rotors below the 3.5 m/s cut-in wind speed is minimized (i.e. the blades are “feathered”). Feathering of turbine blades below the 3.5

m/s cut-in wind speed would be implemented on a nightly basis from sunset to sunrise, adjusted for sunset/sunrise time weekly, from August 1 to October 15 annually.

3. 5.0 m/s Cut-in Speed (Feathered) Alternative (Applicant's Proposed Action)

Under the 5.0 m/s Cut-in Speed Alternative, seasonal operational adjustments would be implemented and a Permit pursuant to Section 10(a)(1)(B) of the Act would be issued for the take of Indiana bat during the fall migration season (August 1 to October 15) at the three existing phases of the Fowler Ridge Wind Farm and the future phase IV. Fowler Ridge would commit to implementing the Bird and Bat Conservation Strategy (BBCS) as part of this alternative to reduce the potential for impacts to migratory birds and bat species (Appendix D of the EIS). The 5.0 m/s Cut-in speed alternative includes implementation of the HCP to avoid, minimize, mitigate, and monitor take of Indiana bats, in accordance with Section 10 of the Act. The HCP contains the following measures designed to avoid, minimize, mitigate, and monitor take of Indiana bats as a result of operating the Project:

- 1) Minimization through Project Operations – Fowler Ridge would minimize potential take of Indiana bats from operations of the Project by implementing seasonal turbine operational adjustments. Based on the reduced number of overall bat fatalities and lack of Indiana bat fatalities found during the spring and summer compared to the fall during three years of monitoring, the Service has determined the risk to Indiana bats at the Project occur only during the fall migration season. Because take of Indiana bats is expected to occur only during the fall migration season, no operational adjustments would be made during the spring migration season, the summer maternity season, or after October 15. For the term of the Permit (21 years) Fowler Ridge will:
 - a. Raise the turbine cut-in speed to 5.0m/s on a nightly basis from sunset to sunrise, adjusted weekly, from August 1 to October 15 annually.
 - b. Adjust the turbine operational parameters so that the rotation of the turbine blades below cut-in wind speed is minimized (i.e., the blades are “feathered”). Feathering of turbine blades below cut-in wind speed would be implemented on a nightly basis from sunset to sunrise, adjusted for sunset/sunrise times weekly, from August 1 to October 15 annually. Turbines will be monitored and controlled based on wind speed on an individual basis (i.e., the entire facility will not alter cut-in speed at the same time, rather operational changes will be based on wind speed conditions specific to each turbine). It is expected that turbines will begin operating under normal conditions when the 5 to 10 minute rolling average wind speed is above 5.0 m/s; turbines will be

feathered again if the 5 to 10 minute rolling average wind speed goes below 5.0 m/s during the course of the night.

The only exception to feathering turbines below a cut-in speed of 5.0 m/s would occur on nights when temperatures are below 50 degrees Fahrenheit from August 1-October 15. Turbines would be allowed to operate at full capacity when temperatures are below 50 degrees F. Turbines would be monitored and controlled based on temperature on an individual turbine basis. The 5.0 m/s would be resumed if the temperature goes to 50 degrees or above during the course of the night.

4. 6.5 m/s Cut-in Speed (Feathered) Alternative

Under this alternative the HCP would be implemented and a Permit would be issued for the take of Indiana bat during the fall migration season (August 1 to October 15) at the three existing phases of the Project and the future phase IV. Fowler Ridge would commit to implementing the Bird and Bat Conservation Strategy (BBCS) as part of this alternative to reduce the potential for impacts to migratory birds and bat species (Appendix D of the EIS). Fowler Ridge would minimize potential take of Indiana bats from operations of the Project by raising the cut-in speeds to 6.5 m/s. Based on the reduced number of overall bat fatalities and lack of Indiana bat fatalities found during the spring and summer compared to the fall during three years of monitoring, the Service has determined the risk to Indiana bats at the Project occur only during the fall migration season. Because take of Indiana bats is expected to occur only during the fall migration season, no operational adjustments would be made during the spring migration season, the summer maternity season, or after October 15.

Under all alternatives, other than the No-Action Alternative, the HCP would be implemented and seasonal operational adjustments would be implemented, Post-construction bat and bird mortality monitoring would occur to document compliance with the Permit terms throughout the life of the Project, and adaptive management based on post-construction monitoring results would be implemented to maintain take at permitted levels.

Public Involvement

The Service determined that this Project warranted an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) (42 U.S.C. §4321 et seq.). The Service formally initiated public scoping and an environmental review of the project through publication of a Notice of Intent to prepare an Environmental Impact Statement in the Federal Register

on May 25, 2011 (76 FR 30384–30386). The Service also conducted outreach by press release and public notification to inform interested parties to request comments on the scope of the NEPA analysis. A public scoping meeting was held on June 7, 2011 in Fowler, Indiana. A total of 17 written comments were received during the scoping comment period identifying issues about the proposed action and the preparation of the NEPA document. These comments were carefully reviewed and categorized into the issues that informed the analysis of the EIS.

During the EIS development, Service and the Permittees consulted with the Indiana Historic Preservation Office in conjunction with obligations to fulfill requirements under NEPA and Section 106 of the National Historic Preservation Act (16 U.S.C. §§ 470a to 470w-6). Section 106 consultation with the Indiana Historic Preservation Office was concluded with a Programmatic Agreement.

On April 5, 2013, the Service published the Draft EIS and Draft HCP in the Federal Register (78 FR 20690–20692). Public comments were accepted during a 60-day period following publication of the Federal Register Notice of Availability. One public information meeting was held during the comment period, on April 18, 2013 in Fowler, Indiana. Ninety-five comments were received and were taken into account in assessing Project impacts and resulted in some modifications in the EIS and HCP. Responses to comments on the Draft EIS and Draft HCP can be found in Appendix I of the Final EIS and are incorporated herein by reference.

The Final EIS and FHCP were published in the Federal Register for review on January 17, 2014, for a 30-day period (79 FR 3224-3225). Comments were received from one organization. The process of reviewing and considering these comments led to no changes to the final HCP or final EIS. Comments and responses are summarized in the Service's Statement of Findings.

Service Decision

The Service's decision is to adopt the Applicants FHCP proposed action alternative and issue a Permit to the Applicant pursuant to section 10(a)(1)(B) of the Act for the incidental take of the listed as endangered Indiana bat. The proposed FHCP meets the statutory criteria for issuance of a section 10(a)(1)(B) Permit, meets the Applicant's needs, and the FHCP provides an extensive set of conservation measures that minimizes and mitigates for the incidental take of the Indiana bat to the maximum extent practicable that will be implemented during the 21-year term of the Permit.

We base this decision on the review of: the alternatives and their environmental consequences described in the DEIS and FEIS; the DHCP and FHCP; the IA; and the Service's Biological Opinion and Statement of Findings.

Environmentally Preferred Alternative

NEPA regulations require Federal agencies to specify "the alternative or alternatives which were considered to be environmentally preferable" (40 CFR 1505.2(b)). Based on the description of the alternatives considered in detail in the FEIS and this ROD, we have determined that Alternative 1, No-Action Alternative, would cause the least damage to the biological environment and is therefore the environmentally preferable alternative for this proposed Federal action. Alternative 1 addresses the primary threat to the Indiana bat through complete shutdown of all turbines during times when the Indiana bat is most at risk. However Alternative 1 would not result in any of the environmental benefits associated with the conservation measures and mitigation that would otherwise occur under the proposed action Alternative 3.

LITERATURE CITED

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- U.S. Fish and Wildlife Service (Service). 2013a. Draft Environmental Impact Statement for Proposed Habitat Conservation Plan and Incidental Take Permit, Fowler Ridge Wind Farm, Benton County, Indiana. 201 pages plus appendices. Bloomington Indiana Ecological Services Field Office, Bloomington, Indiana.
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- U.S. Fish and Wildlife Service (Service). 2014a. Biological Opinion and Incidental Take Statement for the Application for an Incidental Take Permit for the Federally Endangered Indiana Bat (*Myotis Sodalis*) for the Fowler Ridge Wind Farm, Benton County, Indiana. Bloomington Indiana Ecological Services Field Office, Bloomington, Indiana
- U.S. Fish and Wildlife Service (Service). 2014b. Findings and Recommendations for the Issuance of a Section 10(a)(1)(B) Incidental Take Permit Associated with the Fowler Ridge Wind Farm Habitat Conservation Plan. Bloomington Indiana Ecological Services Field Office, Bloomington, Indiana.

Signature:

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3/14/14