DEPARTMENT OF THE INTERIOR
U.S. FISH & WILDLIFE SERVICE
Endangered Species Permit Office
5600 American Boulevard, West, Suite 990
Bloomington, MN 55437-1458
permitsR3ES@fws.gov

FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

PIONEER TRAIL WIND FARM LLC
dba E.ON CLIMATE AND RENEWABLES
353 N. CLARK, 30TH FLOOR
CHICAGO, IL 60654
U.S.A.

2. AUTHORITY-STATUTES
16 USC 1539(a)

REGULATIONS
50 CFR 17.22

50 CFR 13

3. NUMBER
TE66598B-0

4. RENEWABLE
☒ YES
☐ NO

5. MAY COPY
☒ YES
☐ NO

6. EFFECTIVE
06/26/2015

7. EXPIRES
06/26/2058

8. NAME AND TITLE OF PRINCIPAL OFFICER *(If #1 is a business)*
PAUL BOWMAN
SENIOR VICE PRESIDENT

9. TYPE OF PERMIT
NATIVE ENDANGERED SP. RECOVERY - E WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED
ON LANDS SPECIFIED WITHIN THE ATTACHED SPECIAL TERMS AND CONDITIONS

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

C1. Valid for use by Pioneer Trail Wind Farm LLC (hereafter "Permittee").

D. General permit conditions, set out in Subpart D of 50 CFR 13, and specific conditions contained in Federal Regulations cited in Block #2 above, are hereby made a part of this permit. All activities authorized herein must be carried out in accordance with and for the purpose described in the application submitted. Continued validity, or renewal, of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

E. The validity of this permit is conditioned upon strict observance of all applicable, state, local, tribal, or other federal law.

F. The authorizations granted by this permit are subject to compliance with the Pioneer Trail Wind Farm LLC Habitat Conservation Plan (HCP), executed by Pioneer Trail Wind Farm LLC. This permit and the HCP are binding upon the Permittee, and any authorized officer, employee, contractor, or agent conducting permitted activities.

G. The Permittee is responsible for implementing the HCP, incidental take permit (ITP) and the implementing agreement (IA). The Permittee will allocate sufficient personnel and resources to ensure the effective implementation of the HCP, the ITP and the IA. Failure to implement the HCP, the ITP and the IA will result in permit revocation and/or suspension.

H. Acceptance of this permit serves as evidence that the Permittee and their authorized agents understand and agree to abide by all of the terms of the permit and all sections of title 50 Code of Federal Regulations, parts 13 and 17, pertinent to issuance of incidental take permits. Section 11 of the Endangered Species Act of 1973, as amended (ESA), provides for civil and criminal penalties for failure to comply with permit conditions.

☒ ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS
ANNUAL REPORT DUE: 12/31

ISSUED BY: Charles Wooley

TITLE: Charles M. Wooley
Acting Regional Director

DATE: 06/26/2015

I. The authority issued to the Permittee applies to all officers, directors, employees, agents, subsidiaries, contractors, and subcontractors. The Permittee is liable for any permit violations that occur by any of the persons and/or entities referenced in this paragraph or by any other persons and/or entities under the direct control of the Permittee. The Permittee shall conduct educational programs to inform all such persons and entities of the commitments and provisions in the HCP, the ITP and the IA. The Permittee shall be responsible for supervising their compliance with those provisions and terms and conditions, and all applicable contracts between Permittee and such persons and entities, where relevant, shall require their compliance with the HCP, the IA and this permit.

J. The Permittee is authorized under the Endangered Species Act of 1973, as amended (Act), to incidentally take the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*), to the extent and in the manner set forth in the HCP. Take must occur incidental to otherwise lawful activities associated with operation and maintenance of the Pioneer Trail Wind Farm LLC as described in the HCP, and as conditioned herein. Activities associated with mitigation land is also authorized.

K. A copy of this permit must be in possession of the Permittee and designated agents while conducting covered activities.

L. Unless the permit is amended, suspended, revoked, or terminated, the permit duration is 43 years. The ITP must be amended prior to the Permittee making changes to the covered activities, the Project, or the conservation plan, as described in the HCP.

M. This permit authorizes Pioneer Trail Wind Farm LLC to take up to 129 Indiana bats and 86 northern long-eared bats over the 43-year ITP term, as described in section 6.4.2.3 of the HCP.

N. The Permittee shall ensure that all minimization measures and mitigation activities are carried out, as described in section 7.2 of the HCP.

O. The Permittee shall ensure that all monitoring activities and reporting requirements are carried out, as described in section 7.3 of the HCP.

P. The Permittee will comply with the adaptive management processes designed for the minimization measures, as described in section 7.4 of the HCP.

Q. The Federal "No Surprises" Rule, 63 FR 8859 (February 23, 1998; codified at 50 CFR §§ 17.3, 17.22(b)(5), 17.32(b)(5)) provides assurances to the Permittee, provided that the Permittee has properly implemented the HCP, the ITP, and the IA, as described in section 8.2 of the HCP.

R. The Permittee will assure the funding needed to implement the HCP, as described in section 8.1.4 of the HCP, in a form acceptable to the Service (e.g., letter of credit, escrow account, cash). The Surety will provide funds to assure the Service that all commitments of the HCP are met.

S. The Permittee will provide staff members and resources for the implementation of the HCP, as described in section 8.1 of the HCP.

T. For the purposes of monitoring, compliance, reporting, and administration of the terms of this permit, except where otherwise specified in the HCP, the contact office for the Service shall be the U.S. Fish and Wildlife Service's Rock Island Ecological Services Field Office (see V.2. below).

U. Reports are due on December 31 following each year this permit is in effect. Copies of your reports shall be sent to the offices listed below. When possible, electronic copies shall be submitted in lieu of hard copies in MS Word, Portable Document Format, Rich Text Format, or other file format that is compatible with the receiving office.

V.1. Regional Permits Coordinator

U.S. Fish and Wildlife Service - Region 3

Division of Ecological Services

5600 American Blvd. W., Suite 990

Bloomington, Minnesota 55437-1458

(612/713-5343; fax 612/713-5292)

permitsR3ES@fws.gov

V.2 Field Supervisor

U.S. Fish and Wildlife Service

Rock Island Ecological Services Field Office

1511 47th Ave.

Moline, Illinois 61265

(309/757-5800, x215; fax 309/757-5807)

V.3. Endangered Species Coordinator

Illinois Department of Natural Resources

Division of Natural Heritage

One Natural Resource Way

Springfield, Illinois 62702-1271

217/785-8764; fax 217/785-2438)

Final Environmental Assessment for

Proposed Habitat Conservation Plan and Incidental Take Permit

Pioneer Trail Wind Farm

Ford County and Iroquois County, Illinois

FINDING OF NO SIGNIFICANT IMPACT

May 2015

U.S. Fish and Wildlife Service
Rock Island Ecological Services Field Office
1511 - 47th Ave
Moline, Illinois 61265

Table of Contents

I. Introduction **1**

Background 1

Alternatives Considered 2

Operational Adjustments 2

II. Impact of HCP Implementation **3**

Indiana Bats and Northern Long-eared Bats 3

Mitigation for Unavoidable Take of Listed Bats 4

Unlisted Bats 5

Birds 5

Vegetation 5

III. Public Involvement **6**

Release of Draft EA and Draft HCP 6

Public Comments 6

IV. Changes Made to EA **6**

V. Service Finding **7**

VI. Conclusion **8**

VII. Literature Cited **9**

Project: Pioneer Trail Wind Farm Habitat Conservation Plan

Errata Form No. 01

The U.S. Fish and Wildlife Service notes the following errors in the Pioneer Trail Wind Farm Finding of No Significant Impact.

1. Page 1, paragraph 6, sentence 2 should read: "The project currently avoids take of listed species by curtailing turbines to a cut-in wind speed of 6.9 m/s from sunset to sunrise from August 15 through October 15."

2. Page 2, paragraph 6, sentence 2 should read: "Under this alternative, PTWF would implement a less restrictive operational plan than alternative 1, where all turbines would operate at 5.0 m/s (11.2 mph) from sunset to sunrise from August 15 through October 15 when the ambient temperature is above 10°C (50°F) based on a 10-minute rolling average".

3. Page 4, paragraph 5, sentence 1 should read: "PTWF will implement minimization measures through their curtailment strategy. All turbines will operate at 5.0 m/s (11.2 mph) from sunset to sunrise from August 15 through October 15 when the ambient temperature is above 10°C (50°F) based on a 10-minute rolling average."

I. INTRODUCTION

This Finding of No Significant Impact (FONSI) addresses the issuance of an incidental take permit (ITP) pursuant to the Endangered Species Act of 1973, as amended (ESA; 16 United States Code [USC] §§ 1531–1544) and its regulations pertinent to incidental take permitting (50 Code of Federal Regulations [CFR] § 22.26) related to the operation of the Pioneer Trail Wind Farm (the Project), located in Ford and Iroquois counties, Illinois. The Project is owned and operated by Pioneer Trail Wind Farm, LLC (PTWF or Applicant), a wholly owned subsidiary of E.ON Climate & Renewables, North America.

In accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. § 4321 et seq.) and its implementing regulations (40 CFR §1500-1508) and the Department of Interior's regulations for implementing NEPA (43 CFR §§ 46.300-325), we, the U.S. Fish and Wildlife Service (Service) prepared an Environmental Assessment (EA) analyzing the impacts on the human environment associated with permit issuance (Environmental Assessment for Proposed Habitat Conservation Plan and Incidental Take Permit) based on the Project's Habitat Conservation Plan (Project HCP), as well as other alternatives. The final EA is incorporated by reference into this FONSI. Permit issuance will authorize take of covered species, Indiana bat (*Myotis sodalis*) and northern long-eared bat (*M. septentrionalis*). This take will be incidental to otherwise lawful activities described in the Project HCP. PTWF has requested a permit duration of 43 years.

The EA and Project HCP detail the impacts of the incidental take on the Indiana bat and northern long-eared bat and how these impacts will be avoided, minimized, and mitigated. Incidental Take Permits (ITPs) may be issued only in compliance with section 10 of the ESA. This means that to consider permit issuance, we must determine if the take is compatible with the issuance criteria included in the ESA (section 10(a)(1)(B)) and its implementing regulations (50 CFR parts 17 and 222).

The EA evaluated a range of reasonable alternatives, based on their ability to meet our purpose and need, and the associated impacts to the human environment. Upon review of the EA, the Service concludes that a finding of no significant impact is appropriate. Following review and analysis, the Service has chosen to issue an incidental take permit as described under our Preferred Alternative, which is Alternative 2 of the EA.

BACKGROUND

The Project is a wind energy facility with a nameplate capacity of 150-megawatts (MW) and comprises 94 1.6-MW wind turbine generators, an operations and maintenance building, access roads, collector line system, and substation. Approximately 3 miles of overhead transmission line extends from the existing Paxton West substation to a newly constructed substation on the Project site.

As a way to avoid and minimize impacts to bird and listed bat species, the Project is currently operating under a 2012 Avian and Bat Protection Plan (ABPP) prepared by the PTWF, and a technical assistance letter from the Service received in March of 2012. The project currently avoids take of listed species by curtailing turbines to a cut-in wind speed of 6.9 m/s 30 minutes before sunset to 30 minutes after sunrise from August 15 through October 15. This time period coincides with the expected fall migration season

of the Indiana bat and northern long-eared bat in the area. Implementation of this measure at the Project is expected to make take of the both bat species unlikely.

ALTERNATIVES CONSIDERED

As referenced in the CEQ NEPA regulations regarding the contents of an EA (40 CFR § 1508.9[b]), NEPA section 102(2)(E) requires federal agencies to develop, study, and briefly describe alternatives to any proposed action with the potential to result in unresolved resource conflicts. The EA considers the Applicant's proposed action (i.e., issuance of an incidental take permit), a no-action alternative, and one other action alternative. The following is a brief description of the alternatives considered. For a complete description, as well as alternatives that were considered but not evaluated further, see EA Chapter 2.

For all three alternatives analyzed in this EA, the Applicant would implement the measures specified in their Bird and Bat Conservation Strategy (BBCS; Appendix A of EA), including post-construction monitoring and adaptive management plan.

Operational Adjustments

The alternatives vary by the operational modifications and mitigation measures for Indiana bats and northern long-eared bats. Operational modifications will be implemented through turbine cut-in speeds during the period from August 15 through October 15. Cut-in speeds are expected to affect the extent of bat mortality and amount of electrical power generated.

Alternative 1: No-Action Alternative (No ITP issued). Under this alternative, all turbines at the PTWF would continue to operate at 6.9 meters per second (m/s) (15.4 miles per hour [mph]) from 30 minutes before sunset to 30 minutes after sunrise from August 15 through October 15. Operating the project under this scenario would avoid take of Indiana bats and northern long-eared bats. The HCP would not be implemented, and the ITP would not be issued. The Project would implement the Bird and Bat Conservation Strategy (BBCS, provided in Appendix A of the EA).

Alternative 2: Preferred Alternative (ITP Issuance, HCP with 5.0 m/s Cut-in Speed Minimization and Mitigation Measures). Under this alternative, PTWF would implement a less restrictive operational plan than alternative 1, where all turbines would operate at 5.0 m/s (11.2 mph) from 30 minutes before sunset to 30 minutes after sunrise from August 15 through October 15 when the ambient temperature is above 10°C (50°F) based on a 10-minute rolling average. PTWF would implement mitigation measures to off-set the impacts associated with take of covered species, including effectiveness monitoring and adaptive management. The Service would issue an ITP for a 43-year term, and PTWF would implement an HCP and the BBCS in place of the existing ABPP.

Alternative 3: Non-Restricted Operations (ITP Issuance, HCP with 3.5 m/s Cut-in Speed and Mitigation Measures Only). Under this alternative, all turbines at the PTWF would operate at a 3.5 m/s (7.8 mph) cut-in speed to maximize energy production. The Project would implement the BBCS and the Applicant's proposed HCP. However, the HCP would not include measures for minimizing Indiana bat and northern long-eared bat fatalities, only mitigation to off-set the impacts associated with take of covered species. The Service would issue an ITP for a 43-year term, and PTWF would implement an HCP and the BBCS in place of the existing ABPP.

II. IMPACT OF HCP IMPLEMENTATION

The EA evaluated potential impacts that could result from the issuance of the ITP and implementation of an associated HCP. The EA assisted us in evaluating effects on the human environment and in assessing the significance of the impacts that could result from the alternatives. "Significant" under NEPA requires consideration of both the context and intensity of short- and long-term effects of the proposal (40 CFR § 1508.27).

NEPA requires Federal agencies to consider the environmental impacts of "Federal actions". Scope of an agency's NEPA analysis is determined by the extent of the "Federal action" in question, namely on the impacts caused by the incidental take, which the Service authorizes through issuance of an ITP, and the impacts caused by implementation of the HCPs conservation measures, which the Service approves as part of an ITP application. Any activity covered by the ITP and associated HCP (i.e., "covered activity") was fully analyzed in the EA.

In an HCP, "covered activities" are activities with the potential to cause take, and for which a species conservation measure is normally applied to minimize and/or mitigate for the impact of take caused by the covered activity. Take that is incidental to a covered activity, as long as a permit holder applies the conservation measure appropriately, is not prohibited under Section 9 of the ESA. Activities that do not cause take of either Indiana bats or NLEBs were not considered for purposes of determining the significance of the proposed federal action. Specifically, we compared and contrasted how the species conservation measures would potentially change the environmental impacts caused by the applicant's activities. In other words, we analyzed the difference between the environmental impacts caused by the applicant's activities without species conservation measures and with species conservation measures. The "net impact" (or difference) is what is attributable to the Services proposed action.

Implementing the Preferred Alternative would not result in significant impacts on any of the environmental resources identified in the EA in consideration of the context and intensity of the project. The Preferred Alternative is consistent with our purpose and need as stated in the EA.

The Applicant's Project has already been constructed and operating for more than 2 years. The effects associated with the Preferred Alternative (i.e., issuance of an ITP contingent on implementation of the HCP) are related to impacts from future Project operations and maintenance, and future mitigation projects. Of these activities, only impacts from Project operations are anticipated to result in the incidental take of listed species.

While impacts to wildlife resources will be minimized through measures specified in the HCP and BBCS, Project operations are anticipated to have adverse effects to Indiana bats, northern long-eared bats, non-listed bats, and some birds. Below we provide a summary of the impact analysis, compensatory mitigation measures, and conclusions for these resources. In addition, we summarize the potential beneficial effects to these resources from the compensatory mitigation measures.

INDIANA BATS AND NORTHERN LONG-EARED BATS

As indicated in Section 6.4 of the Project HCP, the Applicant has estimated the Project could result in lethal take of up to 129 Indiana bats and 86 northern long-eared bats over the 43-year term of the ITP. While no empirical evidence supports this estimate, the Applicant expects take will generally be evenly

distributed over the permit term, suggesting an annual take of 3 Indiana bats and 2 northern long-eared bats per year. Because there is no suitable summer habitat proximal to the Project, this annual take is expected to occur in the fall when both bat species are migrating through the area.

Bat migration patterns and associated collision risk are likely to vary from year to year; hence, annual take may not be exactly 3 Indiana bats or 2 northern long-eared bats each year. Through post-construction monitoring and adaptive management, the Applicant will address this uncertainty and help guard against exceedance of permitted take. Under adaptive management, the applicant will raise cut-in speeds and implement additional mortality monitoring with each modification of cut-in speed given either of the following two circumstances:

1. Average estimated take of Indiana bats exceeds 3 per year during 2 consecutive years of monitoring, or
2. Average estimated take of northern long-eared bat exceeds 2 per year during 2 consecutive years of monitoring.

The impact of taking 129 Indiana bats and 86 northern long-eared bats is assessed through mortality to females and their lost reproductive potential. For Indiana bats, the Project is estimated to kill 97 females (assuming females comprise 75% of Indiana bats killed). The loss of those 97 female bats is likely to result in lost reproductive potential in the population in addition to the direct mortality of individuals. Thus, the total number of Indiana bats expected to be removed from the population over the 43-year permit term includes the take estimate (129 Indiana bats) as well as the lost reproductive contribution (184 total female pups) of the 97 female bats lost (based on 1.9 female pups/bat), for a total of approximately 313 Indiana bats. This represents 0.16% of the estimated 2013 population of the Ozark-Central Recovery Unit (OCRU) (197,707 Indiana bats; USFWS 2013), in which the Project is located, and take will be distributed over 43 years. .

Mitigation for Unavoidable Take of Listed Bats

PTWF will implement minimization measures through their curtailment strategy. All turbines will operate at 5.0 m/s (11.2 mph) from 30 minutes before sunset to 30 minutes after sunrise from August 15 through October 15 when the ambient temperature is above 10°C (50°F) based on a 10-minute rolling average. This is predicted to reduce take by at least 50% compared to operation at manufacturer's cut-in speed of 3.5 m/s during the fall migration. To mitigate unavoidable take and the impact of taking Indiana bats and NLEBs, PTWF will implement winter and summer habitat mitigation projects. Constructing a protective gate at Griffith Cave, a known priority 2 Indiana bat hibernaculum, and restoring and preserving a minimum of 206 acres of riparian forest and associated habitats along the Middle Fork Vermilion River, is expected to fully off-set the impact of the permitted take of Indiana bats and northern long-eared bats. The hibernaculum gating is expected to increase winter survival of hibernating Indiana bats in the cave by significantly reducing winter arousal and stress from hibernation caused by human disturbance. The summer habitat mitigation is expected to provide intact roosting and/or foraging habitat, increase the carrying capacity of existing maternity habitat, and promote growth in size and number of maternity colonies in the area, i.e., Vermilion River watershed.

UNLISTED BATS

Under the Preferred Alternative, we estimate approximately 760 more unlisted bats could be killed annually than under the No-Action Alternative. This could occur as a result of decreasing cut-in speeds from 6.9 m/s to 5 m/s during the fall migration period. This also assumes that the Applicant would continue to curtail their operations at 6.9 m/s wind speeds. Cumulatively, this could result in the Preferred Alternative impacting approximately 32,700 more unlisted bats than the No-Action Alternative over the 43-year permit term (see page 108 of the EA). These fatalities will presumably be 87% long-distance migratory bat species, hoary bat (*Lasiurus cinereus*), eastern red bat (*Lasiurus borealis*), and silver-haired bat (*Lasionycteris noctivagans*); and 13% cave-hibernating species, little brown bat (*Myotis lucifugus*), tri-colored bat (*Perimyotis subflavus*), and big brown bat (*Eptesicus fuscus*).

Little information is available about the population estimates of non-listed bats to determine for certain the significance of these impacts. In the context of white-nose syndrome, annual mortality of cave-dwelling bats from this wind project is considerably less than mortality expected from this disease. To the best of our knowledge, migratory tree bats are common and widely distributed, but population sizes and structures are unknown. Not enough information exists to accurately assess population level impacts of the fatalities of these species caused by PTWF. Given the relatively small geographic footprint of this single project and assuming that other locations may have equal or greater migratory populations, it is logical to conclude that impacts from the project are not expected to be significant.

Further, mitigation developed for Indiana bats and northern long-eared bats may incidentally benefit migratory tree bat and non-listed cave-dwelling species. Little brown bats, tri-colored bats, and big brown bats hibernate in the cave targeted for off-site mitigation under the Preferred Alternative. Similarly, migratory tree-roosting bats are likely to benefit from the summer habitat mitigation project, which will restore and preserve a minimum of 206 acres of riparian forest in the Vermilion River watershed.

BIRDS

The Service anticipates no major adverse effects to the local bird community as a result of the Preferred Alternative. Implementation of the BBCS will ensure that post-construction mortality results will be reviewed to assess collision impacts.

No impacts to bald eagles or golden eagles from the Project are anticipated based on the location of the Project area and the distribution of eagles in the area. The Preferred Alternative will not result in the loss or degradation of habitat for a rare, threatened, or endangered bird species. The Project is sited in a highly disturbed landscape dominated by intensive agriculture.

VEGETATION

The Preferred Alternative will have beneficial effects to native vegetation resources where reforestation will occur in association with the summer habitat mitigation project. The Preferred Alternative will not reduce any naturally occurring plant population to numbers below levels for maintaining viability at the local or regional level. Substantial loss or degradation of soil stabilization services or habitat for a rare, threatened, or endangered plant species are not expected. The Preferred Alternative is not expected to

result in the introduction of invasive species, and may actually inhibit invasive plants from becoming established in the long-term.

III. PUBLIC INVOLVEMENT

RELEASE OF DRAFT EA AND DRAFT HCP

On August 6, 2014, the Service published a Federal Register notice indicating the draft EA and draft Project HCP were available for comment for 45 days. The Service offered links to both documents on their website and provided copies whenever requested.

PUBLIC COMMENTS

The Service received 2 comment letters on the drafts of the EA and HCP of which nearly all the comments were on the Project HCP. Letters were from 1 state agency and 1 individual. Comments on the draft HCP and the Service's and Applicant's responses to comments are on file at the Rock Island Field Office.

PTWF made minor changes to the HCP in response to public comments, mostly to update current information on Indiana bats and northern long-eared bats in Illinois. In kind, the Service updated the Final EA to reflect current information on the two bat species.

IV. CHANGES MADE TO EA

Since the release of the draft EA, the Service listed the northern long-eared bat as threatened under the ESA on April 2, 2015 (USFWS 2015). The final rule on the listing became effective May 4, 2015. The EA now reflects this revised status in several places. The ITP will authorize take of northern long-eared bats as well as Indiana bats.

Since the release of the draft EA, the Service has obtained additional records of Indiana bat and northern long-eared bat fatalities at wind projects. These records are now referenced in Section 4.3.4.2 in the Final EA.

The list below indicates substantive changes made to the EA to reflect corresponding changes in the Final Project HCP.

1. Project decommissioning is no longer a covered activity. Decommissioning is not expected to result in take of listed species or affect other resources. References in the EA to decommissioning as a covered activity have been removed throughout the document.
2. Fatality monitoring at the Project will occur during the spring season in Year 7 of ITP issuance and every 10 years thereafter. Changes in the Final EA are reflected in Section 2.2.1.2.
3. Although they will not be used to estimate annual take of covered species, incidental finds (i.e., those not detected during standardized searches) will be included in the take totals from the annual survey. Changes in the Final EA are reflected in Section 2.2.1.2.
4. The Final HCP expresses that PTWF will implement adaptive management measures based on annual expected take *averages* to provide assurance that total authorized levels of take will not be exceeded. Changes in Final EA are reflected in Section 2.2.3.5 Adaptive Management.

V. SERVICE FINDING

Following the public review and consideration of comments received, the Service has selected an alternative as described below.

The agency's preferred alternative (alternative 2) is the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors (40 CFR §§ 1500-1508). Therefore, in accordance with the NEPA (40 CFR §1508.13), the Service has selected Alternative 2 (ITP Issuance, HCP with 5.0 m/s Cut-in Speed Minimization and Mitigation Measures). Under this alternative, the Service will adopt the Applicant's Final HCP and Implementing Agreement and issue an ITP to the Applicant pursuant to section 10(a)(1)(B) of the Act for the incidental take of the endangered Indiana bat and threatened northern long-eared bat. The selection of Alternative 2 as the Preferred Alternative is driven by our wildlife conservation mission, priorities, and statutory responsibilities (ESA, Bald and Golden Eagle Protection Act, and Migratory Bird Treaty Act) to conserve listed bats and migratory birds while giving consideration to economic, environmental, technical, and other factors.

Alternative 1: No-Action Alternative. This alternative would result in no mortality of listed bats or other *Myotis* species. This alternative would result in mortality to other unlisted bats, particularly long-distance migratory species. We estimate the mortality to long-distance migratory species would be roughly 40% less than that under the Preferred Alternative. Bird mortality under the No-Action Alternative would not differ from the two action alternatives.

Alternative 2: Preferred Alternative ((ITP Issuance, HCP with 5.0 m/s Cut-in Speed Minimization and Mitigation Measures). This alternative reflects PTWF's application for a permit to take listed bats incidental to otherwise lawful operation of 94 wind turbines. This alternative is designed to meet biological objectives and permit issuance criteria while fulfilling agency statutory mission and responsibilities.

Alternative 3: Non-Restricted Operations (ITP Issuance, HCP with 3.5 m/s Cut-in Speed and Mitigation Measures Only). This alternative has much greater impacts to listed and unlisted bats than either Alternatives 1 or 2, but an equivalent impact on birds. Because there would be no implementation of minimization measures to address bat mortality, this alternative is likely to result in at least 100% greater mortality in all bat species as compared to Alternative 2.

PTWF has applied for an ITP and included an HCP to meet our biological objectives and permit issuance criteria. If the permit issuance criteria contained in section 10(a)(1)(B) of the ESA are satisfied, the Service shall issue the permit to the applicant consistent with ESA implementing regulations found at 43 CFR § 17.22 (b)(2). Within these guidelines the Service may decide to issue a permit conditioned upon implementation of the HCP as submitted by the applicant, or to issue a permit conditioned upon implementation of the HCP as submitted together with other measures specified by the Service. If the ESA's criteria are not satisfied, the Service is required to deny the permit request. Thus the Service has limited discretion and authority within which to select an alternative.

In accordance with the NEPA (40 CFR §§ 1500-1508) and ESA regulations (50 CFR § 17.22 (b)(2)), and based on consideration of agency and public comments on the draft EA, the Service has identified

Alternative 2 (ITP Issuance, HCP with 5.0 m/s Cut-in Speed Minimization and Mitigation Measures) as the Preferred Alternative. Of the alternatives evaluated in this final EA, this alternative best meets the agency purpose and need to conserve listed bats, and respond to an ITP application, while fulfilling our statutory mission and responsibilities and considering economic, environmental, technical, and other factors.

We base this decision on the review of information taken from:

1. agency and public comments on the draft EA and draft HCP;
2. considered alternatives and their environmental consequences disclosed in the draft EA and final EA;
3. the draft HCP and final HCP;
4. the Implementing Agreement;
5. the Service's Biological Opinion; and
6. the Service's Statement of Findings.

The Service also finds that Alternative 2: Preferred Alternative (ITP Issuance, HCP with 5.0 m/s Cut-in Speed Minimization and Mitigation Measures) implements all practicable means to avoid or minimize environmental harm in light of our statutory mission and responsibilities and consideration to economic, environmental, technical and other factors.

VI. CONCLUSION

Therefore, it is my decision to issue an ITP conditioned upon implementation of the HCP as submitted by the Applicant together with other measures specified by the Service. The proposed final HCP meets the statutory criteria for issuance of a section 10(a)(1)(B) permit and meets the Applicant's need to operate a wind energy facility with up to 150-MW nameplate capacity while complying with the ESA. The final HCP provides an extensive set of conservation measures that minimize take and mitigate for the impact of unavoidable incidental take of listed bats to the maximum extent practicable during the 43–year term of the ITP. The final HCP also includes monitoring, reporting, and an adaptive management strategy to facilitate limiting the take of the Indiana bat and northern long-eared bat. The Service's permit will include enforceable permit terms and conditions requiring implementation of the avoidance, minimization, mitigation, funding, and reporting conditions in the HCP Implementing Agreement, as well as other measures specified by the Service:

Within the context of the Services' ESA and MBTA regulatory authority, all practicable means to avoid or minimize environmental harm from the selected alternative have been adopted.

Signature:

6/28/15

Tom Melius
Regional Director, Region 3
U.S. Fish and Wildlife Service

Date

for

VII. LITERATURE CITED

USFWS. 2013. 2013 rangewide population estimate for the Indiana bat (*Myotis sodalis*) by USFWS Region and Recovery Unit. U.S. Fish and Wildlife Service, Bloomington, Indiana, USA.

USFWS. 2015. Threatened species status for the northern long-eared bat with 4(d) rule; final rule and interim rule. 80 Federal Register 17974-18033. 2 April.

FINDINGS AND RECOMMENDATIONS FOR THE ISSUANCE OF A SECTION 10(a)(1)(B) INCIDENTAL TAKE PERMIT ASSOCIATED WITH THE PIONEER TRAIL WIND FARM HABITAT CONSERVATION PLAN

I. DESCRIPTION OF THE PROPOSED ACTION

A. Introduction

The U.S. Fish and Wildlife Service (Service) proposes to issue an Incidental Take Permit (ITP or Permit) for 43 years to Pioneer Trail Wind Farm LLC (Permittee or PTWF) for the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened northern long-eared bat (*Myotis septentrionalis*) (NLEB). The Service is authorized to complete this action under the authority of section 10(a)(1)(B) and section 10(a)(2) of the Endangered Species Act of 1973, as amended (Act). The purpose of the Permit is to authorize the incidental take of Indiana bats and NLEBs associated with the operation of the Pioneer Trail Wind Farm(the Project) in Ford and Iroquois counties, Illinois.

In support of their section 10(a)(1)(B) permit application, and as required by the Act, the applicant has submitted to the Service a complete habitat conservation plan entitled "Habitat Conservation Plan for the Indiana Bat and the Northern Long-Eared Bat, Pioneer Trail Wind Farm, Iroquois and Ford Counties, Illinois" (HCP) (PTWF 2015). The effects of the Service issuing the section 10(a)(1)(B) permit are analyzed in the Service's Biological Opinion (USFWS 2015a). The Service's Final Environmental Assessment (USFWS 2015b) for the proposed HCP and Permit was also used in preparation of this statement of findings. All of these documents are incorporated by reference.

The Service has determined that activities conducted in compliance with the Permit are not likely to jeopardize the continued existence of the Indiana bat orNLEB. This document summarizes the Service's analysis and findings regarding whether the HCP meets the incidental take permit issuance criteria described in section 10(a)(2)(B) of the Act.

B. Description of the Pioneer Trail Wind Farm Project

Pioneer Trail Wind Farm is an operational project consisting of 94 1.6 MW wind turbine generators (WTGs) and is designed to generate approximately 150 MW of electricity. The project area includes land leased by the Permittee for the operation of the Project. The wind turbine generators constructed for the project are the primary component that may cause take of the Indiana bat and NLEB; therefore, the project area includes the area in which all 94 of the existing turbines will be located. In addition, the project area includes land leased for other facilities associated with the Project, such as the collection system, switchyard, meteorological tower, and connector lines. Lastly, the project area also will cover the lands upon which compensatory mitigation projects will occur.. Summer habitat restoration and preservation is expected to equal 206 acres; winter habitat mitigation consists of gating and management of Griffiths Cave in southern Illinois. The project is currently operating under a curtailment regime where take of both species is not likely to occur (i.e., curtailment of turbines to a cut-in wind

speed of 6.9 m/s 30 minutes before sunset to 30 minutes after sunrise from August 15 through October 15 when the ambient temperature is above 50°F (10°C)). This time period coincides with the expected fall migration season of the Indiana bat and as indicated in the technical assistance letter, implementation of this measure at the project is expected to make take of the Indiana bat by the wind facility unlikely.

C. Covered Species

The Permittee is applying for an ITP for the Indiana bat and NLEB for the covered activities as described below. The Indiana bat is currently listed as endangered and the NLEB is currently listed as threatened under the ESA. Currently no other listed species are known to occur within the boundaries of the Pioneer Trail Wind Farm. The proposed term of the ITP is 43 years. This is based on the duration of project site leases, which incorporate 25-year terms with two 10-year extensions at PTWF's option.

D. Types of Activities Covered by the ITP

The Permittee, in consultation with the Service, has determined which activities could potentially result in incidental take of Indiana bats and NLEBs, that are reasonably certain to occur, and for which the applicant has control. Therefore, the Permittee is requesting the following activities be considered "Covered Activities" under the HCP:

1. Operation and maintenance of the existing 94 turbines included in the Project.

2. Activities associated with the proposed mitigation measures.

For these activities, the Permittee will implement conservation measures to avoid, minimize and mitigate potential take that may occur as a result of project operations, maintenance, and mitigation.

E. Conservation Strategy

The conservation strategy contained in the HCP includes the following: (1) identification and implementation of incidental take avoidance, minimization, and mitigation measures to reduce impacts to the Indiana bat and NLEB; (2) monitoring, reporting and notification requirements; and (3) responding to potential changed circumstances.

1. Incidental Take Avoidance, Minimization and Mitigation Measures

The proposed action describes a number of measures to avoid, minimize or mitigate the adverse effects to the Indiana bat and NLEB. Collectively these proposed actions reduce take of Indiana bats and NLEBs, restore and protect summer habitat, and restore and protect through gating a Priority 2 hibernaculum.

These measures include:

A. Operational measures to reduce take of listed bats: increase in cut-in speeds from the designed 7.8 mph (3.5 m/s) to 11.2 mph (5.0 m/s) on nights during the fall migratory period (15 August through 15 October) when the ambient temperature is above 50°F (10°C) based on a 10-minute rolling average.

B. For the remainder of the year, PTWF would feather turbine blades at wind speeds below the manufacturer's recommended cut-in speed of 3.5 m/s;

C. Off-site conservation measures to mitigate for the unavoidable take of Indiana bats and NLEBs and for the impact of such takings. These measures include the restoration and/or preservation of 206 acres of grassland and forest habitat and the gating of a known priority 2 hibernacula; and

D. Post-construction monitoring during the spring and fall, an adaptive management strategy, and a program to address potential changed circumstances.

2. Monitoring, Reporting, and Notification Requirements

The HCP proposes fatality monitoring at the wind farm site and biological monitoring at the summer and winter habitat mitigation sites. The monitoring, reporting, and notification requirements focus on the collection of fatality data at the wind farm, success of the proposed habitat restoration and management at the summer mitigation sites, a spring migratory study at the gated cave, and a notification process necessary for the Service to ensure HCP compliance. These requirements include:

A. Mortality monitoring and reporting of bat and bird carcasses found at search turbines during the spring (April 1 – May 15) and fall (August 15 – October 15), at the Project for the operational life of the project (43 years). Fall mortality monitoring will occur annually for the first two years after ITP issuance and every fifth year thereafter. Spring mortality monitoring will occur beginning in year 7 post-ITP issuance and every 10 years thereafter.

B. Habitat restoration, including cave gating;

C. Notifying the Service within 48 hours if any eagles or federally threatened or endangered species carcasses are discovered during mortality monitoring;

D. The implementation of an adaptive management strategy to ensure compliance with take authorizations. Adaptive management may include the increase or reduction of cut-in speeds and additional monitoring, as described in Section 7.4 of the HCP.

E. Notifying the Service if any operational changes are to be made as a result of adaptive management.

3. Responding to Potential Changed Circumstances

HCP assurances ('No Surprises'), described in 63 FR 8859, provides a foundation for contingency planning in a HCP. The No Surprises rule defines and clarifies the difference between unforeseen circumstances and changed circumstances. . Unforeseen circumstances means changes in circumstances that could not be anticipated or planned for that result in a substantial and adverse change in the status of a covered species. If unforeseen circumstances arise, the Service will not require, without the consent of the permittee, the commitment of additional mitigation in the form of land, water, or funds nor will it require additional restrictions on the use of land, water, or funds from any permittee who is adequately implementing or has implemented an approved HCP. Should unforeseen circumstances occur, the process for responding to them in 50 CFR 17.32(a)(5) or 17.22(a)(5) will be followed. Changed circumstances are those changes that can be reasonably anticipated or planned for. The HCP plans for these contingencies by identifying potential changed circumstances and the appropriate response to these events..

The HCP identifies the following as foreseeable changed circumstances warranting planning consideration: 1) listing of a new species, 2) delisting of a species, 3) repowering/extension of the project operating life, 4) climate change, 5) drought, 6) flooding; 7) fire, 8) tornadoes, and 9) White-Nose Syndrome (WNS). Each of these potential changed circumstances are addressed in Section 8.2 of the HCP, along with descriptions of triggers that will indicate the circumstances have occurred and responses that can be implemented and measured for effectiveness.

II. ANALYSIS OF EFFECTS

The Service has determined that the impacts likely to result to the Indiana bat and NLEB from the proposed action will be minimized and mitigated to the maximum extent practicable by measures described in the HCP and the associated Permit. All turbines will operate at a 5.0 m/s (11.2 mph) cut-in speed from sunset to sunrise when the ambient temperature is above 10°C (50°F) for the period from August 15 through October 15. This is predicted to reduce take by at least 50% (compared to operation at manufacturer's recommended cut-in speed of 3.5 m/s) during the fall migration. The effects of the proposed action on the Indiana bat and NLEB are fully analyzed in the HCP and the Service's Biological Opinion (BO), which are incorporated by reference and summarized below.

For the proposed project, effects were analyzed for Indiana bats and NLEBs that migrate through the project area. There is no Indiana bat or NLEB habitat in the project area; we assumed that the only Indiana bat and NLEB use of the area is bats flying through the airspace above PTWF during migration. Effects of proposed mitigation, which have been incorporated into the project, were assessed.

The impact of taking 129 Indiana bats and 86 northern long-eared bats is assessed through mortality to females and their lost reproductive potential. For Indiana bats, the project is predicted to kill 97 females (assuming females comprise 75% of Indiana bats killed). The loss of those 97 female bats is likely to result in lost reproductive potential in the population in addition to the direct mortality. Thus, the total number of Indiana bats expected to be impacted over the 43-year permit term includes the take estimate (129 Indiana bats) as well as the lost reproductive contribution (184 total female pups) of the 97 female bats lost (based on 1.9 female pups/bat), for a total of approximately 313 Indiana bats.

Similarly, over the 43-year life of the Project, NLEB mortality could include 43 females (assuming a 1:1 ratio of females to males) as well as the lost reproductive contribution of the 43 females taken (82 female pups), resulting in approximately 125 female northern long-eared bats taken over the 43 year period. With the addition of males (43), the total take will be approximately 168 northern long-eared bats.

To mitigate unavoidable take and the impact of the taking of Indiana bats and NLEBs, PTWF will conduct winter and summer habitat mitigation projects. Winter habitat mitigation will involve constructing a protective gate at Griffith Cave, a known priority 2 Indiana bat hibernaculum, for the purpose of protecting hibernating bats and enhancing winter survival rates. Summer mitigation will involve restoring and preserving 206 acres of riparian forest and associated habitats along the Middle Fork of the Vermilion River. The hibernaculum gating is expected to increase winter survival of hibernating Indiana bats in the cave by significantly reducing winter arousal and stress from hibernation caused by human disturbance. The summer habitat mitigation is expected to provide intact roosting and/or foraging habitat, increase the carrying capacity of existing maternity habitat, and promote growth in size and number of maternity colonies in the area, i.e., Vermilion River watershed.

III. INCIDENTAL TAKE PERMIT CRITERIA - ANALYSIS AND FINDINGS

Section 10(a)(2)(A) of the Act requires that no permit may be issued by the Service authorizing any taking unless the applicant submits a conservation plan that specifies the following: the impact that will likely result from such taking; what steps the applicant will take to minimize and mitigate such impacts and the funding that will be available to implement such steps; what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and such other measures as the Service may require as being necessary or appropriate for the purposes of the plan. Section 10(a)(2)(B) of the Act mandates that the Service issue a permit if the taking will be incidental; the impacts of such taking are minimized and mitigated to the maximum extent practicable; the applicant assures adequate funding for the plan; and if the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

With regard to this specific project, permit actions, and section 10(a)(2)(B) requirements, the Service makes the following findings:

1. <u>The taking will be incidental.</u>

The Service finds that the taking of Indiana bats and NLEBs under the HCP will be incidental to otherwise lawful activities. The activities for which incidental take coverage are sought under the Permit are the operation of the Pioneer Trail Wind Farm in Ford and Iroquois County, Illinois and activities associated with the proposed mitigation measures. Any take of Indiana bats or NLEBs associated with these activities will be incidental to, and not the purpose of, these lawful activities.

2. <u>The Permittee will, to the maximum extent practicable, minimize and mitigate the impacts of taking of covered animal species and the effects to other Covered Species that may occur within the Permit Areas.</u>

The Service finds that PTWF will minimize and mitigate the impacts of take of Indiana bats and NLEBs to the maximum extent practicable. PTWF has developed an HCP, pursuant to the incidental take permit requirements codified at 50 CFR 17.22(b)(1) and 50 CFR 17.32(b)(1), which require measures to minimize and mitigate the effects of issuing the Permit. Under the provisions of the HCP, the impacts of take will be minimized, mitigated, and monitored through the following measures:

A. Implementation of incidental take avoidance and minimization measures to reduce impacts to the Indiana bat and NLEB, as described above;

B. Restoring and permanently protecting summer habitat within the range of one or more extant Indiana bat and NLEB maternity colonies;

C. Permanently protecting a vulnerable population of Indiana bats and NLEBs at a Priority 2 hibernaculum through human access restriction (gating); and

D. The establishment of a robust monitoring and reporting program to ensure compliance with the HCP and ITP and effectiveness of the mitigation, and a notification protocol between the company and the Service.

To make the finding that the conservation measures included in the HCP avoid, minimize and mitigate the impacts of take to the maximum extent practicable, the Service must first evaluate whether the conservation measures are rationally related to the level of take anticipated under the plan. Take is defined under the Act to include those actions that harass, harm or kill listed species. In effect, the conservation measures need to address the biological needs of the Indiana bat and NLEB in a manner that is commensurate with the impacts to the species allowed under the HCP. The Service believes that the impacts of take for both species will be effectively minimized and mitigated by three conservation actions.

A. The project will reduce take by at least 50% by increasing cut-in speeds in accordance with the feathering regime outlined in Section 7.2 of the HCP during the fall migratory period;

B. Two hundred and six acres of known Indiana bat and NLEB summer habitat will be restored and protected; and

C. Vulnerable Indiana bats and NLEBs that hibernate within a Priority 2 hibernaculum will be protected through gating of the cave entrance.

The Service believes the level of minimization and mitigation provided for in the HCP fully compensates for the impacts of take of both the Indiana bat and the NLEB. The primary form of take is direct mortality resulting from interactions with the wind turbine generators. Two alternatives to take were considered in the HCP to determine its practicability:

1. Operational curtailment to avoid any take of Indiana bats and NLEBs, and

2. The applicants proposed action.

Under the first alternative, take of Indiana bat and NLEBs would be avoided by raising cut-in speeds to 6.9 m/s from sunset to sunrise during the fall migratory season of the Indiana bat and NLEB. As a result, no section 10(a)(1)(B) permit would be issued and no HCP would be implemented by the applicant. This alternative was rejected because it would not meet the applicant's purpose and need of the project, and the project would not be economically sustainable over its projected operating life.

Under the applicant's proposed action, the turbines would be feathered up to a cut-in speed of 5.0 m/s during the fall migratory period from sunset to sunrise, when the ambient temperature is above 50°F (10°C) based on a 10-minute rolling average, and mitigation for the impacts of take would be conducted. The applicant's proposed action meets the applicant's purpose and need of an economically sustainable project, and the Service agrees that the minimization and mitigation measures proposed under this alternative will be effective and sufficient to protect both species. Based on this information, the Service determined the minimization and mitigation measures will minimize and mitigate the impacts of take of Indiana bat and NLEBs to the maximum extent practicable.

3. <u>The applicant will ensure that adequate funding for the plan and procedures to deal with unforeseen circumstances will be provided</u>.

Under section 10(a)(2)(A)(ii) and 10(a)(2)(B)(iii) of the ESA, an HCP submitted in support of an ITP must establish "the funding that will be available to implement such steps the applicant will take to monitor, minimize, and mitigate the impacts from the proposed taking." 50 C.F.R. § 17.22(b)(1).

As indicated in Table 14 of the HCP, the total cost for the monitoring, mitigation, and changed circumstances in the HCP are estimated to be approximately $3,685,410. Mitigation costs, including land acquisition, restoration, and management activities will be spread over the first 10-15 years of the permit term, depending upon availability of mitigation lands and opportunities, while monitoring and reporting costs will be spread out over the full 43-year permit term. It is anticipated that all of the budgeted costs reflected in Table 14, including costs associated with any changed circumstances, will be paid for out of PTWF's operations budget.

In the event that PTWF was unable to meet its financial commitment for mitigation or changed circumstances for any reason, its corporate parent, E.ON Climate & Renewables North America (ECRNA), has sufficient resources to fund these measures. ECRNA is a subsidiary of E.ON AG, one of the world's largest energy companies and the largest investor-owned utility in the world. However, in order to provide the USFWS with additional financial security, PTWF will provide an irrevocable Letter of Credit with a Standby Trust Agreement in the amount of $2,855,410 to

assure the Service that all commitments of this HCP will be met. The Letter of Credit will renew on an annual basis, with the total amount adjusted annually for inflation and reduced each year to reflect the estimated cost of the financial commitment remaining for any mitigation not yet completed, plus funding for potential changed circumstances. However, to ensure that adequate funds will always remain available to address remaining mitigation commitments as well as any changed circumstances that may arise, the Letter of Credit will at all times remain at an amount no less than $252,710 (adjusted annually for inflation). Should PTWF fail to obtain this letter of credit, such failure would provide valid grounds to suspend and/or revoke the permit in accordance with 50 C.F.R. §§ 13.27 and 13.28.

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

The Service finds that the taking to be authorized under the proposed Permit will not appreciably reduce the likelihood of the survival and recovery of the Indiana bat and NLEB in the wild. The Act's legislative history establishes the intent of Congress that this issuance criterion be identical to a finding of "no jeopardy" pursuant to section 7(a)(2) of the Act and the implementing regulations pertaining thereto (50 CFR 402.02). As a result, the Service has reviewed the HCP under section 7 of the Act. In the BO, which is incorporated herein by reference, the Service has concluded that the issuance of the proposed Permit is not likely to jeopardize the continued existence of the Indiana bat and NLEB. Our conclusion is based on the results of the effects analysis that indicate the project does not cause an appreciable difference in the fitness of the maternity colonies or hibernating populations. Therefore, we conclude that it is unlikely that the proposed project will cause appreciable reductions in the likelihood of survival and recovery of Indiana bat and NLEBs within the Midwest Recovery Unit or the range-wide population.

In addition to the effects from the proposed action, the implementing regulations require the Service to evaluate the effects of the action taken together with cumulative effects. Cumulative effects include the effects of future state, tribal, local or private actions that are reasonably certain to occur in the Action Area considered in the BO. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

As stated in the BO, the only known potential Indiana bat and NLEB use of the area is in the airspace over PTWF during spring and fall migration. Therefore, actions on the ground (e.g. tree clearing, road construction) will not affect Indiana bat and NLEB habitat, because none are present. We also do not anticipate that Indiana bat and NLEB habitat will develop in the project area in the foreseeable future. The Service is unaware of any future state, tribal, local or private actions, other than the proposed project, which would impose significant cumulative effects on the Indiana bat and NLEBs that use the area.

Similarly, there is no designated critical habitat for the Indiana bat and NLEB in or near the project area. Thus, cumulative effects to critical habitat, from the proposed action in concert with any future state, tribal, local or private actions in the project area, are not anticipated.

After reviewing the current status of the Indiana bat and NLEB, the environmental baseline for the project area, the effects of the proposed actions at PTWF, and the cumulative effects, it is the Service's biological opinion that operation of PTWF, as proposed, is not likely to jeopardize the continued existence of the Indiana bat and NLEB.

5. Other measures, as required by the Director of the Fish and Wildlife Service, as necessary or appropriate for purposes of the plan will be met.

The Service finds that all additional measures required by the Service as necessary or appropriate for the HCP are included in the HCP, IA, the Permit, and by extension the BO.

6. The Service has received the necessary assurances that the plan will be implemented.

PTWF warrants that it has, and will expend, the funds identified in the HCP, as such funds may be necessary to fulfill its obligations under the HCP. The Service finds that the HCP provides the necessary assurances that the plan will be carried out by PTWF.

IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS -- FINDINGS

The Service has no evidence that the Permit application should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b) - (c).

V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the Service's proposed action, I recommend approval of an Incidental Take Permit for the Indiana bat and NLEB in accordance with the Pioneer Trail Wind Farm HCP.

Kraig M Peck
Acting Chief, Threatened and Endangered Species

6/4/15
Date

REFERENCES

U.S. Fish and Wildlife Service (USFWS). 2012a. Indiana Bat (*Myotis sodalis*). USFWS Endangered Species Program: Midwest Region. Updated March 6, 2012. Available online at: http://www.fws.gov/midwest/endangered/mammals/inba/index.html

U.S. Fish and Wildlife Service (USFWS). 2012b. Species Profiles. Last updated August 2012. USFWS Endangered Species Program homepage: http://www.fws.gov/endangered/; Environmental Conservation Online System (ECOS): http://ecos.fws.gov/ecos/indexPublic.do. Species profile for Indiana bat page available online at: http://ecos.fws.gov/speciesProfile/profile/species Profile.action?spcode=A000;

U.S. Fish and Wildlife Service (USFWS). 2015. Final Environmental Assessment for Proposed Habitat Conservation Plan and Incidental Take Permit, Pioneer Trail Wind Farm. 150 pages plus appendices.

U.S. Fish and Wildlife Service (USFWS). 2015. Biological Opinion and Incidental Take Statement – proposed issuance of an Incidental Take Permit and approval of an associated Habitat Conservation Plan – Pioneer Trail Wind Farm.