

U.S. FISH AND WILDLIFE SERVICE
SOUTHWEST REGIONAL OFFICE
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FINDING OF NO SIGNIFICANT IMPACT

Thunder Ranch Wind Project, Garfield, Kay, and Noble counties, Oklahoma

The U.S. Fish and Wildlife Service (the Service) proposes to issue a 30-year permit (ITP) for take of Bald Eagles (*Haliaeetus leucocephalus*) that is incidental to otherwise lawful activities associated with the operation of the Thunder Ranch Wind Project, Garfield, Kay, and Noble counties, Oklahoma (Project), under authorization of the Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d and 50 Code of Federal Regulations [CFR] § 22.26). The permit would authorize non-purposeful (incidental) take of up to 48 Bald Eagles over the 30-year life of the permit. The Service will monitor the Project's eagle take, coordinate with the Applicant every 5 years to reassess the ITP (eagle mortality rates, measures to reduce take, compensatory mitigation, and eagle population status, as needed), and adjust the ITP as necessary to maintain compliance with the preservation standards of the Bald and Golden Eagle Protection Act.

The Service prepared an Environmental Assessment (EA) that tiered off the Service's Programmatic Environmental Impact Statement for the Eagle Rule Revision, December 2016 (PEIS; Service 2016) to analyze the environmental effects of one permit alternative and the no action alternative for authorizing take of eagles. The Service incorporates the EA by reference into this Finding of No Significant Impact (FONSI). Together they constitute the Service's NEPA finding.

As the responsible official, I have evaluated the effects of the proposed action and alternatives relative to the definition of significance established by the CEQ Regulations (40 CFR 1508.13). I have reviewed and considered the EA and documentation included in the project record, and I have determined that the proposed action and alternatives will not have a significant effect on the quality of the human environment. As a result, no environmental impact statement will be prepared. My rationale for this finding is as follows.

Purpose and Need for Action

The purpose of this action is to issue an Eagle Act permit to Thunder Ranch Wind Project, LLC that will authorize potential lethal take of Bald Eagles that is incidental to otherwise lawful activities associated with the operation of the Thunder Ranch Wind Project. The need for the action is to respond to the application from Thunder Ranch Wind's parent company, Enel Green Power North America, Inc., requesting a permit to legally authorize that take.

The Service has analyzed one no action alternative for the proposed action. A second Alternative was considered but not evaluated.

Proposed Action – Issue 30-year Bald Eagle ITP (preferred alternative)

The Service would issue an eagle ITP for the non-purposeful take of up to 48 Bald Eagles for the 30-year period, with associated permit conditions.

Alternative 1 – No Action

The Service would take no further action on the permit application. The Service assumes that the applicant will implement all measures required by other agencies and jurisdictions to conduct the activity at this site, but the conservation measures proposed in the ITP application package would not be required.

The Service selected Proposed Action Alternative over the other alternative

Effect	Proposed Action - ITP	Alternative 1 - No Action
Eagle Take Levels	48 bald eagles over 30 years	48 bald eagles over 30 years
Avoidance and Minimization	<ul style="list-style-type: none"> • Movement of Project boundary seven miles west to avoid habitat associated with the Arkansas River • Siting of turbines at least 2.1 miles away from eagle nests and away from wetlands, streams, ponds, and other water bodies • Enforcement of slow driving speeds during construction • Management of waste and disposal throughout construction and operations phases 	<ul style="list-style-type: none"> • Movement of Project boundary seven miles west to avoid habitat associated with the Arkansas River • Siting of turbines at least 2.1 miles away from eagle nests and away from wetlands, streams, ponds, and other water bodies • Enforcement of slow driving speeds during construction • Management of waste and disposal throughout construction and operations phases
Compensatory Mitigation	None required	None provided
Adaptive Management	<ul style="list-style-type: none"> • If one detected fatality occurs in one year, assess cause or contributing factors and whether a management response is warranted/feasible • If two detected eagle fatalities in one-year, complete site evaluation, implement additional livestock carcass removal, consultation to revise management actions • If three detected eagle fatalities in one year, implement and test 	None

	<p>additional deterrents to eagles (e.g. line, noise, or drone deterrent systems)</p> <ul style="list-style-type: none"> • Coordination or other measures if eagle nest is constructed within 660 ft of Project infrastructure 	
Data Collected by USFWS	Annual monitoring report of fatalities; reporting of injured eagles; information on the effects of specific, applied, conservation measures.	None
Company Liability for Eagle Take	No (if in compliance with permit conditions)	Yes

The Proposed Action Alternative allows the Service to monitor and manage take of Bald Eagles throughout the life of the Project without significantly affecting regional or local eagle populations. It is preferable to the other alternative for the following reasons.

- The avoidance and minimization measures associated with the Proposed Action, along with the additional adaptive management measures, are designed to further ensure that the permit is compatible with the preservation of Bald Eagles.
- Because no measures would be implemented to avoid or minimize risk to eagles under this No-Action Alternative, the risk to eagles is expected to be higher under this alternative as compared to the Proposed Action. Under this alternative, direct impacts on the Bald Eagle population over the 30-year life of the Thunder Ranch Wind Project are anticipated to be the loss of 48 eagles (1.6 eagles per year over 30 years). No adaptive management measures would be triggered should take exceed that level and none of the impacts to Bald Eagles would be offset by compensatory mitigation.

The Service concludes that issuing an eagle permit under Proposed Action Alternative would result in the following non-significant environmental, social, and economic effects:

Environmental effects would be limited to the direct take of Bald Eagles (fatalities via collisions with turbines), which is well within the limits of the take thresholds analyzed in the 2016 PEIS. Small changes in local population dynamics may occur under either Alternative but we expect the overall effect on Bald Eagle take at the Project will not significantly impact local area eagle populations. The Service does not anticipate that nest disturbance or territory loss effects to occur at the Project. The EA concludes that there will be no significant effects on migratory birds, including any threatened and endangered bird species that could potentially occur in Garfield, Kay, and Noble counties.

On May 23, 2019, the Service emailed and mailed an information handout and a letter to all Tribes within the Southwest Region, providing details on the Project, the regulatory process, and informing them that the Draft EA would be posted to the Migratory Bird Program Permits NEPA Reviews webpage. On June 12, 2019, the Service released the Draft EA for public comment,

identifying two alternatives, including the preferred alternative. The Draft EA was available for 62 days and it was posted on the Region 2 Migratory Bird Program Permits NEPA Reviews webpage. The Service also presented on this EA, by request, at the EPA Region 6 Tribal Operations Committee Caucus Meeting on July 16, 2019. The Service received responses to the Draft EA from the two Tribes listed below indicating no concerns.

- White Mountain Apache Tribe
- Ponca Tribe

The U.S. Environmental Protection Agency submitted a letter on August 5, 2019, requesting that we evaluate cumulative and indirect air quality impacts, with potential impacts from temporary, long-term, or cumulative degradation of air quality. Emissions, particularly as related to climate change were evaluated in the PEIS. Per the PEIS, issuance of eagle ITPs will not directly produce emissions or emissions reductions.

The Oklahoma State Historic Preservation Office submitted a letter on July 15, 2019, objecting to the Service's interpretation of Section 106 of the National Historic Preservation Act and the area of potential effect. Because the Project is operational, they had no other comments. The issue of NHPA was addressed in the Director's memo 062416 dated February 24, 2016 and in the PEIS. The Area of Potential Effect (APE), as defined in 36 CFR 800.16(d), should include the areas where the Service has authorized take and influenced the project through negotiation of the avoidance, minimization, and mitigation measures, as well as the activities associated with their implementation. That has been detailed in the EA and this document. In addition, Section 106 compliance may require government-to-government consultation with tribes. Tribal consultation is also detailed in the EA and this document.

Cumulative effects

The Proposed Action in this EA is the issuance of a permit authorizing take of Bald Eagles. The issuance of this permit to allow take in itself does not necessarily result in mortality of an eagle, but the cumulative mortality from multiple factors may result in the Service re-evaluating the take threshold. The estimated 48 Bald Eagles over 30 years is substantially below the Central Flyway Eagle Management Unit cumulative allowable take of 70 Bald Eagles and the Local Area Population cumulative allowable take of 12 Bald Eagles annually. Small changes in population dynamics may occur, but the Service concludes that the overall effect of Bald Eagle take at the Project under the proposed alternative will not significantly impact local area eagle populations. We do not expect nest disturbance or territory loss effects to occur at the Project.

Because authorized take remains below the EMU take thresholds, no compensatory mitigation is needed to meet the Eagle Act preservation standard. However, the Applicant intends to implement voluntary mitigation in order to conserve bald eagle populations. These measures cannot be explicitly quantified or tied to a numerical benefit, and as such would not count as involuntary mitigation measures according to the Service's definitions.

Measures to mitigate and/or minimize adverse effects would be required in the proposed action. In addition, the applicant has already implemented several measures in anticipation of applying for a permit. These measures include:

Avoidance and Minimization

- Minimization of roads, power lines, fences, and other Project infrastructure;
- Relocation of Project boundaries away from the Arkansas River, siting of proposed turbine locations to avoid wetlands, streams, ponds, and other bodies of water and at least 2.1 miles from any known bald eagle nest;
- Use of metrological towers that are free-standing rather than dependent on guy-wires; and
- Burial of all collection lines and use of bird diverters on transmission lines to avoid collisions with birds in accordance with Avian Power Line Interaction Committee (APLIC) standards (APLIC 2012).

Monitoring

- The terms and conditions outlined in a permit from the Service authorizing incidental take, would require all eagle mortality monitoring and bias correction trials to meet design approval and third party requirements as outlined in the 2016 Eagle Rule. At least one year of eagle mortality monitoring and bias correction trials will be required during each five-year review period.
- At each 5-year permit review, based on estimated actual take during the preceding 5 years, the Service will, if appropriate, adjust predicted (not-to-exceed) take for the next 5 years, and maximum authorized take over the full 30-year permit. The Service will estimate actual take based on the observed levels of take at the project. Once this review is complete, the Service will adjust compensatory mitigation requirements accordingly.

Compensatory Mitigation

- Because authorized take remains below the EMU take thresholds, no compensatory mitigation is needed to meet the Eagle Act preservation standard. However, the Applicant intends to implement voluntary mitigation in order to conserve bald eagle populations. These measures cannot be explicitly quantified or tied to a numerical benefit, and as such would not count as involuntary mitigation measures according to the Service's definitions.

Significance

Significance, as used in NEPA, requires considerations of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. The covered area, a wind facility of approximately 136 square miles (87,014.7 acres) is limited to a relatively small area within the nearly 2748 square miles of Garfield, Kay, and Noble counties, Oklahoma. Although no suitable nesting or communal roost habitat was identified in the Project area, suitable habitat for breeding, migrating, and wintering Bald Eagles does exist within the LAP analysis area, in areas associated with water features and the Salt Plains National Wildlife Refuge (33 miles northwest of the Project area). The Eagle Risk Assessment identified potential nesting areas within the LAP analysis area along the Arkansas River and within the Salt Plains National

Wildlife Refuge.

In 2016, the Eagle Rule Revision incorporated a Local Area Population (LAP) cumulative effects analysis into permit issuance. This LAP analysis involves compiling information on permitted anthropogenic mortality of eagles within a specified distance (derived from each eagle species' natal dispersal distance) of the permitted activities' boundary. If permitted eagle take exceeds 5% of the estimated population size of either species within the LAP area, additional take is a concern. The 5% take threshold for the Project's LAP is 12 Bald Eagles. Under the Proposed Action, it is estimated that 1.6 Bald Eagles may be taken annually, and 48 Bald Eagles taken over the life of the permit (i.e., 30 years). This prediction is based on a conservative approach that is expected to overestimate annual and cumulative take at the outset of the permit. Therefore, we consider the context of the impacts (both negative and beneficial) to be negligible for the State and the remainder of the Nation.

Intensity refers to the severity of the impacts. We have considered the following regulatory factors (as detailed in the EA) in evaluating intensity.

- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

While consideration of the intensity of project impacts must include analysis of both beneficial and adverse effects, only a significant adverse effect triggers the need to prepare an Environmental Impact Statement (EIS) (40 C.F.R. 1508.27). The potential beneficial effects and adverse impacts of the Selected Alternative are discussed briefly below.

Beneficial Effects. The Selected Alternative includes implementation of the ECP and adaptive management, which includes mortality monitoring that will benefit the Service's understanding of mortality of Bald Eagles at the Project. Our analysis is in comparison to the No Action Alternative under which the Project continues to operate without any eagle ITP requirements or conservation commitments. Issuance of this permit will allow the Project to operate in compliance with the Eagle Act should eagle take occur, while also providing the Service with valuable data from monitoring requirements.

Adverse Effects. As described in the EA, the Applicant has worked with the Service in development of the ECP to ensure that it contains commitments to avoid and minimize adverse effects on eagles. The Proposed Action Alternative incorporates these measures. Even so, birds, including eagles, can be injured and killed by collision with wind turbines. The Project's ECP describes commitments to avoid and minimize impacts to eagles. Eagle mortality will be monitored and an adaptive management plan will be implemented to address impacts as operational data are gathered.

In summary, the analyses in the EA and implementation of the measures identified in the Proposed Action Alternative (including those in the ECP) support the conclusion that the Selected Alternative will not have a significant effect on the quality of the human environment.

- (2) The degree to which the proposed action affects public health or safety.

We do not expect either the issuance of an eagle ITP to affect public health and safety. Therefore, we did not consider public health and safety issues for further analysis in the EA.

- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The issuance of an eagle ITP is not expected to impact wetlands, wild or scenic rivers, ecologically critical areas, or park lands; and these resources do not occur within the covered area. There are no previously recorded artifacts or archaeological sites within the boundary of the project. We describe our analysis of these resources in detail in Section 3 of the EA.

- (4) The degree to which the possible effects on the quality of the human environment are likely to be highly controversial.

We have no evidence to suggest that the effects on the quality of the human environment are likely to be highly controversial.

- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The ECP prepared for the Project and the Service's CRM to estimate eagle take were developed to address any uncertainty regarding impacts. The Proposed Action Alternative requires a rigorous mortality monitoring design to reduce uncertainty regarding impacts to eagles. The adaptive management process will further reduce and monitor potential impacts to eagles from operation of the Project. Issuance of the permit and the implementation of the ECP will also reduce impacts to avian populations.

Additionally, we did not identify predicted effects to any other environmental resources or values from operation and maintenance of the Project that are highly uncertain or involve unique or unknown risks.

- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Review of future actions will be on their own merits, regulated by all surveys, monitoring, and analyses required by the Service. Thus, the issuance of the requested permit would not establish a precedent for future actions or represent a decision in principle about future actions with potentially significant environmental effects.

- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a

cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The proposed project is not directly related to any other future action. We evaluated cumulative effects on bald eagles as required by NEPA (C.F.R. 1508.8) and the Eagle Act's permitting regulations. As noted above, the 5% take threshold for the Project's LAP is 12 Bald Eagles. To date, one other permit has been issued within the LAP. The Service has established take limits for Bald Eagle populations by EMU in the Final Environmental Assessment (FEA) for the 2009 Eagle Act take regulations and these were revised in the PEIS. This Project is within the Central Flyway EMU, which has an annual take threshold of 70 Bald Eagles per year (USFWS 2016b). The predicted take of Bald Eagle at the Project is 1.6 per year, well under the EMU take limit.

- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

No adverse impacts to districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places; or, significant scientific, cultural, or historical resources are expected to result from the proposed action, since none are known from the covered area.

- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Six threatened or endangered species were identified through an Intra-Service Section 7 Biological Evaluation. No Critical Habitat exists in the Project area for any of these species. Interior Least Tern (*Sterna antillarum*) and Piping Plover (*Charadrius melodus*) may rarely use the project area during migration. The Project area itself does not contain breeding habitat. The Rufa Red Knot (*Calidris canutus rufa*), Whooping Crane (*Grus americana*), Arkansas River Shiner (*Notropis girardi*), and American Burying Beetle (*Nicrophorus americanus*) are unlikely to be found in the project area.

- (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The issuance of a Permit does not violate applicable Federal, State, or local laws or requirements imposed for the protection of the environment. All permits state that the permit holder is responsible for ensuring that the permitted activity is in compliance with all federal, tribal, state, and local laws and regulations applicable to eagles.

The Service concluded that neither the proposed action nor any of the alternatives will have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 because:

The Project is already built and operational. Issuing a permit authorizing incidental take of Bald Eagles under any of the action alternatives will not affect wetlands or floodplains.

The Service has thoroughly coordinated the proposed action with all interested and/or affected parties. Parties contacted include:

In May 2019, the Service emailed and mailed an information handout and a letter to the Oklahoma State Historic Preservation Office, Oklahoma Department of Wildlife Conservation, and all Tribes within the Southwest Region. On June 12, 2019, the Service released the EA for public comment for 62 days and posted it on the Region 2 Migratory Bird Program Permits NEPA Reviews webpage. The Service received responses to the Draft EA from two Tribes indicating no concerns.

I conclude, based on the analysis of potential environmental impacts in the attached EA, that issuing a 50 C.F.R. § 22.26 Eagle Act incidental take permit to AEM, LLC for the Sterling Wind Project will not have any significant effects on the human environment:

For this proposal, the Service's authority is limited to authorizing incidental take of Bald Eagles by the Project, and not Project construction, which is complete. The permit, with its required conditions, will not have any significant effects on natural resources, environmental justice, floodplains, prime and unique farmlands, wetlands, air quality, climate change, communication signals, Federal Aviation Administration transportation, geology/hydrogeology, human health and safety, land use, noise, radar signals, sub-surface minerals, vegetation, visual resources, waters of the U.S., socioeconomic resources, or any other aspect of the human environment.

Therefore, it is my determination that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required. The Service has prepared an environmental assessment in support of this finding. The EA and FONSI are available upon request to the FWS facility identified above or on the Region 2 Migratory Bird Program Permits NEPA Reviews webpage.

References: Final Environmental Assessment for the Proposed Issuance of an Eagle Incidental Take Permit for the Thunder Ranch Wind Project, 2019.



Chief, Migratory Bird Program
U.S. Fish and Wildlife Service, Southwest Region

12/17/19
Date