
Chapter 2

**EIS Scoping, Identification of
Alternatives, and Public Consultation**

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2 EIS Scoping, Identification of Alternatives, and Public Consultation

This section of the EIS describes the public and agency involvement process used to develop the scope of, and identify the major issues to be discussed in the EIS. This includes a discussion of the scoping process, issues identified during the scoping process, identification of alternatives to the Proposed Action, and opportunities for public and agency involvement during EIS development.

2.1 Scoping Process

2.1.1 Scoping Requirements

NEPA regulations (40 C.F.R. 1501) and USFWS guidelines (550 FW 2.3) specifically define the need for a public scoping process when preparing an EIS. The scoping process is an open public process initiated prior to the preparation of an EIS to define a reasonable scope for and reduce the magnitude of an EIS. In particular, the public scoping process should:

- Identify and invite the participation of affected agencies, tribes, and other parties through written comments, public meetings, or other forums;
- Identify the key issues and concerns regarding the Proposed Action;
- Identify only those potentially significant issues relevant to the Proposed Action (while eliminating unimportant issues from further study); and
- Define the form, level of detail, and content of the EIS.

Scoping typically begins with publication in the Federal Register of a notice of intent (NOI) to prepare an EIS. Public scoping for this EIS was first initiated in the form of an NOI to conduct a 30-day scoping period for a NEPA decision on the proposed HCP and ITP and request for comments, published in the Federal Register on January 29, 2010 (75 FR 4840-4842). Formal scoping began for the NEPA analysis on May 26, 2010 when the NOI to prepare a DEIS was published in the Federal Register (75 FR 29575-29577).

2.1.2 Issues Identified During Scoping

Many concerns raised during the Federal scoping process centered on potential impacts to the Indiana bat. These concerns included the need for a full EIS given the uncertainty of impacts and the implications of future wind projects, the need to implement the most protective alternative and mitigation measures, and the need for analysis of cumulative impacts that encompasses ongoing issues such as White Nose Syndrome (WNS), a fatal disease affecting bats in the eastern U.S. Other suggestions raised were to take into account the renewable energy generation aspects of the project, the use of innovative turbine lighting, and protection of cultural resources.

Public interaction and correspondence during the OPSB process was generally similar to the issues raised during an October 28, 2009 public hearing, required as part of the OPSB process. Concerns were expressed about the Project's potential impacts to health and safety associated

with noise, shadow flicker,¹ and ice shedding. Questions were raised about the potential economic benefits of the Project and if it would receive special tax status. Several of the raised concerns were related to environmental impacts, particularly potential effects to Indiana bats, other bats, and birds. Additional concerns were raised about the potential impacts that turbine siting may have on two Champaign County airports.

The public's comments were used to develop the significant issues listed below, along with other issues that were also considered in disclosing environmental impacts. The significant issues were used to drive the analysis and were important in the development of the alternatives. These issues include the following:

- The ITP issued should contain terms and conditions for protecting Indiana bats;
- The Project should implement the alternative that affords protection for the Indiana bat;
- The cumulative effects analysis should encompass activities likely to occur over the life of the Project;
- The renewable energy generated by the Project would be used to assist with compliance with Federal policies that encourage development of renewable energy;
- Noise generated by the Project has the potential to affect the solitude of the area; and
- Cultural resources potentially affected by the Project should be identified and protected.

Along with those listed above, many substantive issues were brought forward during the Project's OPSB Application process, many of which were not restated during the NEPA scoping. However, these issues were also integral to developing the EIS effects analyses.

2.1.3 Issues Considered But Eliminated During Scoping

Following the review of scoping comments, the USFWS reviewed the range of resources that should be considered in an EIS as per NEPA and CEQ guidelines.² This review determined that tourism is not relevant to the Proposed Action or alternatives and that expected impacts would be so minor that they did not need be addressed in the EIS.

¹ Shadow flicker is defined as moving blades passing between the sun and a receptor, creating alternating changes in light intensity of shadows. The spatial relationship between a wind turbine and a receptor, along with weather characteristics such as wind direction and sunshine probability, are key factors related to shadow-flicker impacts. Shadow flicker becomes much less noticeable at distances beyond approximately 1,000 feet, except at sunrise and sunset when shadows are long (NRC, 2007).

² Resources considered for analysis in the EIS included: geology and soils, water resources, air quality including greenhouse gases and climate change, noise, biological resources including vegetation, wildlife, and threatened and endangered species, land use, recreation, tourism, visual resources, socioeconomics and environmental justice, cultural resources, transportation, and safety.

2.2 Alternatives Identified During the EIS Scoping Process

2.2.1 The Applicant's Proposed Action Alternative

The Applicant's Proposed Action was developed with input from Buckeye Wind's application to the OPSB submitted in April 2009; public scoping in January and May 2010; and extensive consultation among Buckeye Wind, ODNR, and the USFWS regarding the HCP. The Applicant's Proposed Action includes issuance of an ITP for construction, operation, maintenance, and decommissioning of a 100-turbine Project and implementation of all measures described in the HCP, including post-construction monitoring, adaptive management, and mitigation. Under this alternative, an ITP for Indiana bats would be issued contingent upon implementation of the HCP in its entirety, including post-construction monitoring to ensure that take remains at or below what is authorized in the ITP and an adaptive management strategy based on the results of post-construction monitoring to address take levels relative to operational constraints over the life of the Project.

2.2.2 Alternatives to the Applicant's Proposed Action Alternative

The alternatives summarized in Table 2.2-1 were identified during scoping and development of the EIS. As shown in this table, two screening criteria (purpose and need and feasibility) were used to evaluate the potential alternatives. Some of the alternatives were excluded from further analysis for the following reasons: if they would not meet the underlying need for or purpose of the Project and associated federal action; if they would likely not have any significant environmental benefit compared to the Project as proposed; if they would likely have significantly greater adverse impacts compared to the Project, as opposed to another alternative; or if they lacked practicality or feasibility. Section 2.3 of this EIS discusses the alternatives that were considered but then eliminated from further analysis.

The reasonable alternatives included for consideration in this EIS are discussed in Section 3.2 and are noted under the column entitled "Recommended Actions" in Table 2.2-1.

Table 2.2-1 Alternatives Considered

Alternative	Purpose and Need				Feasibility		Recommended Action	Comments
	Compliant with ESA, NEPA, and Other Applicable Federal Regulations	Supports Federal and/or State Renewable Energy Initiatives	Provides Air Quality Benefits	Protective of Indiana Bat ¹	Technical Feasibility	Economic Feasibility		
No Action	Yes	No	No	Yes	N/A	No	A	Statutory requirement.
Applicant's Proposed Action Alternative: HCP, varied curtailment based on turbine risk category, Post Construction Mortality Monitoring (PCM), and Adaptive Management (AM)	U	Yes	Yes	U	Yes	Yes	A	Applicant's Proposed Action Alternative designed to meet USFWS goals for Indiana bat. Able to meet generation goal of 250 MW and commercial viability.
Maximally Restricted Operations Alternative: Full turbine curtailment at night from April 1 through October 31	U	Yes	Yes	Yes	Yes	U	A	Alternative would meet USFWS goals for Indiana bat. Applicant asserts that this alternative is not commercially viable (HCP Section 2.6.2.3 and Section 6.6.2). Alternative carried forward for detailed analysis.
Minimally Restricted Operations Alternative: HCP, full turbine curtailment at night with 5.0 m/s cut-in speed from August 1 through October 31, PCM, and AM	U	Yes	Yes	U	Yes	Yes	A	May not meet USFWS' goals for Indiana bat. Able to meet generation goal of 250 MW and commercial viability.
Fewer turbines	U	U	Yes	U	U	U	X	Fewer turbines still pose a risk to Indiana bats. Would not contribute as much to meeting State and Federal renewable energy generation goals (See Section 2.3.2).

Alternative	Purpose and Need				Feasibility		Recommended Action	Comments
	Compliant with ESA, NEPA, and Other Applicable Federal Regulations	Supports Federal and/or State Renewable Energy Initiatives	Provides Air Quality Benefits	Protective of Indiana Bat ¹	Technical Feasibility	Economic Feasibility		
Other locations in western Ohio	U	Yes	Yes	U	U	No ²	X	Outside the Scope of Analysis. Not technologically or economically feasible to evaluate this alternative fully. Moving project may still put Indiana bats at risk in Ohio (See Section 2.3.3).
IITP of a shorter duration (<30 years)	U	Yes	Yes	U	U	No	X	Would not address all covered activities. Available information supports longer IITP duration. Likely that Applicant would not be able to obtain funding to construct and operate (see Section 2.3.1).

Definitions:

Purpose and Need: Yes = Meets stated purpose and need; No = Does not meet stated purpose and need; and U = Uncertain if meets stated purpose and need.

Siting Criteria: Yes = Meets project siting criteria; No = Does not meet project siting criteria; and U = Uncertain if meets project siting criteria.

Recommended Action: A = Alternative retained for detailed analysis in EIS; and X = Alternative removed from consideration in EIS.

¹The determination of whether the Applicant's Proposed Action and alternatives are protective of Indiana bat is the primary subject of this EIS (see Chapters 5 and 6).

² Applicant asserts that it is not practicable to fully develop a commercially viable alternate location. As part of the OPSB Application process, Buckeye filed a Motion for Waiver for the Site Alternative Analysis requirements of the OPSB regulations. This motion included a description of why analysis of alternate sites for this type of project is not feasible (Exhibit Y of the April 2009 OPSB Application). This motion was granted. Further, the OPSB application contains a description of the site selection process and further explains why it would not be feasible to conduct Site Selection Analysis for multiple sites (section 4906-13-03 of the April 2009 OPSB Application).

2.3 Alternatives Considered but Eliminated from Detailed Study

Seven alternatives were identified during preparation of this EIS, including some derived from comments received during the federal and state scoping processes. Some alternatives were eliminated from further analysis because they did not meet the stated goals or objectives of the USFWS or Buckeye Wind. Other alternatives were eliminated because they lacked practicality or feasibility. The following three alternatives were considered to be potentially reasonable, but were eventually eliminated from detailed study.

2.3.1 ITP of a Shorter Duration

This alternative would involve an ITP of a shorter duration than the life of the Project (i.e., less than 30 years). Consistent with the USFWS' Five-Point Policy, the USFWS considers several factors in determining the term of an incidental take permit. USFWS, for instance, takes into account the expected duration of the activities proposed for coverage and the anticipated positive and negative effects on covered species that will likely occur during the course of plan implementation. USFWS also factors in the level of scientific and commercial data underlying the proposed operating conservation program, the length of time necessary to implement and achieve the benefits of the operating conservation program, and the extent to which the program incorporates adaptive management strategies. Additionally, 50 CFR 17.22(b)(4) states that the duration of permits "shall be sufficient to provide adequate assurances to the permittee to commit funding necessary for the activities authorized by the permit, including conservation activities and land use restrictions."

The description of the covered activities includes the construction, operation, maintenance, and decommissioning of the Buckeye Wind Project. This includes operation for up to 25 years. A growing body of scientific literature exists regarding wildlife and wind power interactions, and specifically that bat fatalities can be significantly reduced by implementation of feathering and cut-in speeds. Implementation of rigorous post-construction monitoring and adaptive management can be used over the life of the wind project to track take of Indiana bats and immediately respond if take nears certain thresholds. This addresses the need for flexibility over the long-term, should assumptions (e.g., the effectiveness of specific cut-in speeds) be proven inadequate or the status of the species (e.g., white nose syndrome) change.

Further, the Applicant has stated that it would be difficult to obtain financing for the Project if only a portion of the operational life was addressed in the permit. Given the significant operational implications of the HCP and the legal liabilities of non-compliance with the ESA, the potential to have the ITP expire in the middle of the Project life creates very difficult uncertainties for investors. Therefore, the USFWS acknowledges that financing could be extremely difficult to obtain if the term of the ITP were shorter than the life of the Project.

After considering the expected duration of the activities proposed for coverage, the effects on covered species, the data available to support the avoidance and minimization measures proposed, the length of time necessary to implement mitigation plans, the rigorous monitoring and adaptive management plan, and the difficulty in securing funding for a project with an ITP that does not cover the full operational life of the project, the USFWS has determined that a 30-year ITP term is appropriate, and that evaluating an alternative with a shorter ITP duration is not

necessary to ensure protection of the Indiana bat and meet the other purposes and needs of this EIS.

2.3.2 Reduced Number of Turbines

This alternative would reduce the number of turbines being constructed for the Project. This alternative was eliminated from consideration because, while reducing the number of turbines may reduce the likelihood of Indiana bat take, it would not eliminate the possibility that Indiana bats would be taken. The presence of even one turbine still poses some level of risk to Indiana bats and as such, reducing the number of turbines would decrease the capacity for wind power development without providing a sufficient level of associated environmental benefits. Fewer turbines would generate less than 250 MW, and would therefore contribute less to meeting the requirements of the Ohio AEPS and Federal guidance promoting renewable energy generation (for example, Executive Order 13212, May 18, 2001). Further, a growing body of scientific literature is available to demonstrate that implementing feathering and cut-in speeds significantly reduces bat mortality at wind farms (Good et al. 2012, Good et al. 2011, Arnett et al. 2011, Baerwald et al. 2008) while having a minimal impact on renewable energy generation. Therefore, implementation of proven avoidance and minimization measures to minimize bat, mortality while still allowing renewable energy generation, is preferable over only reducing the number of turbines. Finally, it would not make sense for the Service to evaluate an alternative with less turbines than what is proposed, particularly if the proposed alternative meets the maximum extent practicable standard.

2.3.3 Alternate Location in Ohio

This alternative would construct the same facility in another area of Ohio. This alternative was eliminated from consideration in the EIS because siting of wind power facilities is a complex and technical process that is constrained by a number of factors including wind regime, ability to obtain land leases, proximity to the electrical grid, capacity of the grid to accept additional power, mandatory setbacks (e.g., from residences, roads, property lines, etc.), and many other factors. Buckeye Wind has conducted multiple years of study to select the proposed project location based on these factors, has received state siting certificates (or is in the process of doing so) for the Project, and has submitted an HCP and permit application for a wind project within the delineated Action Area. Therefore the USFWS is evaluating the permit application. It is beyond the scope of the analysis for the USFWS to evaluate other possible areas of the state where wind power could be developed and it is not technically or economically feasible for the USFWS to fully evaluate the entire state for areas that are appropriate for wind power development.

Further, the Applicant asserts that it is not practical or financially feasible for them to fully develop a commercially viable alternate location (see footnote to Table 2.2-1). The process for assessing the feasibility of a second (alternate) location would essentially double the effort and financial expenditure required to develop a single Project (study two but only develop one) and involve years of additional study. Finally, moving the facility would still present a risk (could be greater or lower risk) to Indiana bats. The range of the Indiana bat includes all of Ohio; therefore, moving the facility to another location in Ohio would not necessarily reduce the likelihood that Indiana bats would be affected.

2.4 Public and Agency Involvement

2.4.1 Public and Agency Involvement During EIS Development

Public scoping for the EIS was first initiated in the form of an NOI to conduct a 30-day scoping period for a NEPA decision on the proposed HCP and ITP and request for comments, published in the Federal Register on January 29, 2010 (75 FR 4840-4842). Formal scoping began for the NEPA analysis on May 26, 2010 when the NOI to prepare a DEIS was published in the Federal Register (75 FR 29575-29577). The USFWS also conducted outreach by press releases and public notification to inform interested parties or those potentially affected by the Proposed Action and to request comments on the scope of the NEPA analysis. Comments resulted in the identification of a number of issues related to the Project and the associated HCP. A total of 14 written or verbal comments were submitted during both scoping comment periods identifying issues and concerns about the Proposed Action and the preparation of the EIS. Comments were received via phone, voicemail, electronic mail, and hardcopy mail and are indexed and summarized in Appendix C. These comments were carefully reviewed and categorized into the issues that informed the analysis for the EIS, as described in Sections 2.1 and 2.2.

During the EIS development, USFWS and the Applicant consulted with the Ohio Historic Preservation Office (OHPO) and tribal consultation was initiated in conjunction with obligations to fulfill requirements under NEPA, Section 106 of the NHPA, and AIRFA (see Section 1.7 for a summary of these statutes and their regulations). All organizations identified as potential consulting parties under these cultural statutes and regulations were contacted by letter, and follow-up phone calls, emails, and personal meetings, as necessary, will be conducted in order to provide them with information about the proposed Project and to seek additional input regarding the identification and evaluation of archaeological and historic resources. This consultation process is ongoing.

Among the federally designated tribes consulted are the Absentee-Shawnee Tribe of Oklahoma, the Eastern Shawnee Tribe of Oklahoma, the Miami Tribe of Oklahoma, the Ottawa Tribe of Oklahoma, the Shawnee Tribe, the Hannahville Indian Community, the Citizen Potawatomi Nation, the Prairie Band of Potawatomi Nation, and the Forest County Potawatomi Community. These tribes were invited to comment and participate in accordance with Section 101(d)(6)(B) of the NHPA and 36 C.F.R. Part 800.2(c)(2), respectively. The Eastern Shawnee Tribe of Oklahoma indicated an interest in the Project and consultation with this tribe has been completed.

In addition to federal tribal consultation, the state-recognized Piqua Shawnee Tribe submitted a letter in January 2010 to demonstrate interest in this Project and USFWS formally acknowledged their interest in the Project via letter in August 2010. The Applicant met with Tribal representatives in August 2010 to discuss the Project. In an email to the USFWS, dated February 8, 2013, Mr. Gene Parks (Piqua Shawnee Tribe member) indicated that the Tribe has been in contact with the Applicant, has been granted permission to access all the turbine sites, will continue to monitor bird and bat life in the area, and will monitor construction activities that are near ancient mound sites. Mr. Parks also stated that the email “will conclude our comments on the proposed undertaking.”

The DEIS was published in the Federal Register for public review on June 29, 2012 (77 Fed. Reg. 38819-38821) in accordance with requirements set forth in the NEPA (42 U.S.C. § 4321 *et seq.*) and its implementing regulations (40 CFR 1500-1508). Public comments were accepted during a 90-day period following publication of the Federal Register Notice of Availability. One public information meeting was held during the comment period, on July 12, 2012 in Urbana, Ohio. Comments received were taken into account in assessing Project impacts and potential mitigation and resulted in some modifications in this EIS. Responses to substantive comments on the DEIS and Draft HCP can be found in Appendix K of this EIS.

Following issuance of this Final EIS, the USFWS will publish the ROD documenting its decision on whether to issue the ITP no earlier than 30 days after the Final EIS is published. The USFWS does not have a formal administrative appeal procedure for NEPA decisions. Judicial review of a USFWS NEPA decision can be accomplished in Federal court under the Administrative Procedure Act (5 U.S.C. §500 *et seq.*).

2.4.2 Public and Agency Involvement During Project Development and the OPSB Process

During the Project planning phase and the OPSB application process, Buckeye Wind consulted with state and federal agencies to identify available information on sensitive resources, including water, wetlands, wildlife, and cultural resources. Agencies consulted included USFWS, USACE, FAA, ODNR Division of Wildlife, OHPO, Ohio Department of Transportation (ODOT), Ohio Environmental Protection Agency (OEPA), Ohio Department of Agriculture (ODA), Ohio Department of Development (ODOD), and Ohio Department of Health (ODOH) to obtain guidance on pre-construction surveys, site assessments, and OPSB process requirements.

Prior to filing the OPSB application, Buckeye Wind was required to hold a public informational meeting to advise potentially affected persons of the proposed project. Public input and concerns were gathered to aid in preparation of the OPSB application. Once the application had been submitted and deemed complete, it then was sent to local public officials and made available in area libraries for public viewing; legal notices also were published in area newspapers. At that time, interested parties had the opportunity to be recognized as interveners in the case.

Buckeye Wind held a public informational meeting on June 10, 2008. On April 24, 2009, Buckeye Wind filed its application for a certificate of environmental compatibility and public need with the OPSB. A public hearing was held on October 27, 2009, and evidentiary hearings began October 28, 2009. The OPSB Certificate was issued on March 22, 2010. Various interveners to the process filed applications for rehearing on April 27 and 29, 2010. The applications for rehearing by the interveners were denied on July 15, 2010. A local citizens group appealed to the Ohio Supreme Court, but the Court upheld the issuance of the certificate on March 6, 2012 (*In re Application of Buckeye Wind, L.L.C.*, Slip Opinion No. 2012-Ohio-878).

In addition, information has been shared through several organized activities and Buckeye Wind's active engagement in the community: participation in the Champaign County Wind Turbine Study Group (WTSG); participation in bus tours of operating wind energy facilities; official Board of Trustee and Planning Board meetings; presentations to various schools, churches, and clubs; information booths at the County fair; and through the Project website. In

addition to these activities, public comments were received in response to Buckeye Wind's completed application to the OPSB.

The Project's record of public interaction is available through the PUCO Docketing Information System (<http://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=08-0666&link=DI>).

Champaign Wind LLC, a separate EverPower Wind Holdings, Inc. subsidiary, has initiated the OPSB application procedure for the Buckeye II Wind Project, consisting of approximately 56 turbines (no more than 100 total turbines will be constructed for the Buckeye Wind and Buckeye II Wind projects combined). The Buckeye II Wind Project will be transferred to Buckeye Wind prior to construction. A public information meeting for Champaign Wind LLC was held on January 24, 2012. A public hearing was held on October 25, 2012, and evidentiary hearings began on November 8, 2012. Champaign Wind LLC is currently awaiting a decision by the OPSB regarding its application. Champaign Wind LLC's record of public interaction is available through the PUCO Docketing Information System (<http://dis.puc.state.oh.us/CaseRecord.aspx?CaseNo=12-0160-EL-BGN>).