



Illinois Department of Natural Resources

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JB Pritzker, Governor
Colleen Callahan, Director

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5) and the regulations adopted to implement the Act (17 Ill. Adm. Code 1080), authorization is hereby granted to Big Sky Wind LLC (hereinafter referred to as BSW) for the incidental take of the State-endangered Blanding's Turtle (*Emydoidea blandingii*) and State-threatened Ornate Box Turtle (*Terrapene ornata*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that this taking is incidental to the replacement of 109 of the existing 114 wind turbine generators (WTGs), repower each of the 109 using new state of the art models, and ongoing operations and monitoring activities at the Big Sky Wind Farm in Lee and Bureau Counties in Illinois.

The original ITA to Big Sky Wind was executed July 18, 2007 for the construction of the wind power project, including the installation of the infrastructure (ITA file #29). That ITA has expired, and this current authorization is considered a separate action in the same footprint.

Procedural History

A Conservation Plan prepared by Stantec on behalf of Big Sky Wind DevCo LLC was submitted to the Department on April 1, 2019, as a request for authorization for the incidental take of the Blanding's Turtle and Ornate Box Turtle. The Department requested additional information on May 1 and May 8, 2019, to make the Conservation Plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on June 11, 2019. The final Conservation Plan was accepted as complete by the Department on June 14, 2019. An updated Conservation Plan reflecting a corporate name change to Big Sky Wind was accepted on May 7, 2021. The public notice period and public comments will be detailed under #6 of the Compliance section below.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each are listed below.

1. The taking will not be the purpose of, but will be only incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is for BSW to repower Big Sky Wind Farm's 239.4-megawatt (MW) wind farm in Lee and Bureau

counties, located approximately 11 miles North of Princeton, Illinois and surrounding Ohio, Illinois. Repowering the wind farm will consist of replacing the existing 114 Suzlon S88 WTGs with new, state of the art WTGs. A total of 109 of the 114 existing WTGs will be repowered, whereas the remaining 5 WTGs will be decommissioned and not rebuilt. The 109 repowered WTGs will remain in the same locations as the existing WTGs, and the foundations will be reused, only replacing the towers, nacelles, and blades. The new WTGs will be Vestas V120s. Minor upgrades will be performed to the electrical collection system and WTG foundations as needed and upgrading approximately 4,000 linear feet of collection line (representing less than 3% of the total collection system). The remaining portions of the collection system shall not be modified. Temporary widening of the access roads and foundation areas is necessary to facilitate the repowering construction.

A temporary laydown yard will be used for construction management office trailers, vehicle parking, and material storage. The construction laydown yard is expected to be between 6 to 10 acres personnel will make use of an existing laydown yard in Lee County. No material changes or location movements of the project substation, transmission line, or Operations and Maintenance (O&M) facility shall be permitted. There shall be no material increases in the size of this project. The number of WTGs will be reduced from 114 to 109, and the nameplate MW rating of the Project will increase from 239.4 MW to approximately 239.8 MW due to the larger MW nameplate rating of each repowered WTG. Heavy machinery and equipment will be used to complete this project, which includes excavations, transportation of WTG's and other turbine materials to and from the project site, in addition to turbine assembly. Up to four permanent meteorological (MET) towers will be installed. Additionally, operations and maintenance vehicles must periodically access turbines during normal operations of the windfarm. Proposed activities may result in direct burial or crushing of, and/or noise and vibration disturbance to the Blanding's Turtle and Ornate Box Turtle during project activities.

Total estimated area of impact is approximately 912.4 acres, including the 4,000 linear feet of collection line upgrades and 6-10-acre existing laydown yard. The project area has a footprint of approximately 13,000 acres in Lee and Bureau Counties. The Department concurs that the take of Blanding's Turtle and Ornate Box Turtle that could result from the proposed project is not the purpose of BSW activities but is incidental to the carrying out of an otherwise lawful activity.

2. The parties to the Conservation Plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Proposed avoidance, minimization and mitigation were included in BSW.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by BSW,

based on the life history needs of the Blanding's Turtle and Ornate Box Turtle.
All required minimization and mitigation measures are presented under the Authorization section below.

3. The parties to the Conservation Plan will ensure that adequate funding for the Conservation Plan will be provided.

BSW states a portion of their overall budget for the wind project has been dedicated towards the implementation of conservation and mitigation measures as well as post-construction presence/absence surveys.

The Department accepts this provision as assurance that adequate funding will be available to carry out the terms of the Conservation Plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of survival or recovery of the endangered species or threatened species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Blanding's Turtle (*Emydoidea blandingii*) is an Illinois state-endangered reptile species.

Habitat: The Blanding's Turtle is a semi-aquatic turtle species found in water bodies such as creeks, marshes, and ponds that are adjacent to sandy upland areas. They spend most of their time in water, though they are also known to leave the water to travel between ponds and for females to lay eggs. Blanding's Turtle enters a period of dormancy during the winter, during which they remain buried in the muddy bottoms of deep marshes, backwater pools, and streams.

Reproduction: Blanding's Turtle is a long-lived species, not reaching sexual maturity until 14-20 years of age. Mating likely occurs in April or early May, and nesting takes place from early June to early July. Eggs are typically laid in well-drained, sandy soil in a sunny upland area, and females may travel up to a mile over land to their nesting location. Clutch sizes are varied, ranging from 10-26 eggs per nest, and females only lay one clutch of eggs per year. Since nests are typically far from water, hatchlings must travel long distances after emerging from their nest, subjecting them to increased threat of predation, road mortality, and desiccation.

Population: The decline of Blanding's Turtle populations can be largely attributed to habitat loss and degradation, road and railroad mortality, and nest predation. With high levels of egg and juvenile mortality and low reproductive potential, Blanding's Turtle populations have had difficulty recovering. There are several captive breeding programs for this species in Illinois performing efforts to supplement the wild populations.

Range in Illinois: Blanding's Turtle is most often found in northern Illinois and sporadically found throughout the central part of the state. They have been observed in the last ten (10) years in 21 of 102 counties. There are currently 88

extant Element Occurrence Records for Blanding's Turtle in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has 26 previously issued or pending Incidental Take Authorizations for Blanding's Turtle. This is the second authorization to be granted for the potential take of Blanding's Turtle in Bureau County, the previous ITAs was issued for initial construction of the Big Sky Wind Farm. This is the fourth ITA for this species in Lee County, and one of those previous ITAs was issued for the initial construction of the Big Sky Wind Farm. Previous projects in other counties included residential or commercial developments, highway and bridge construction, the construction of an athletic field, mining, environmental remediation, and the construction and maintenance of electrical lines.

Ornate Box Turtle (*Terrapene ornata*) is an Illinois state-threatened reptile species.

Habitat: The Ornate Box Turtle inhabits prairie grasslands, pastures, fields, sandhills, and open woodland areas. The species is terrestrial but occasionally enters slow, shallow streams. For shelter, the Ornate Box Turtle burrows into friable soil or uses burrows made by other species. They hibernate through winter in burrows up to 5 feet in depth.

Distribution: Their overall range covers most of the central United States. The Ornate Box Turtle can be found from southeastern Wyoming to Wisconsin and Indiana, and south to Arizona and Louisiana.

Reproduction: Mating occurs in the spring or late summer. Nesting occurs between May and August. Females lay 1-2 clutches of 1-8 eggs each year. Eggs hatch in 9-12 weeks. Males are sexually mature in 8-9 years, females in 10-11 years.

Population: The Ornate Box Turtle is at risk from increased urbanization, increased agriculture, road mortality, and poaching.

Range in Illinois: Ornate Box Turtles have been observed in the last ten (10) years in 28 of 102 Illinois counties. There are currently 51 extant Element Occurrence Records for Ornate Box Turtle in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has twelve (12) previously issued or pending Incidental Take Authorizations for the Ornate Box Turtle. This is the third authorization to be granted in Bureau County and fourth to be granted in Lee County. The project is adjacent to a wind energy project and an electric transmission line project for which two (2) Incidental Take Authorizations for Ornate Box Turtle were executed. Previous projects in other counties for which take was authorized include a water line extension, wind farm developments, electric transmission lines, mine vent shafts, and a commercial development project.

Based on the amount of habitat impacted by this project, the number of known

occurrences of Spike in Illinois, an assessment of the potential effect of this project on individual species in the project footprint, the conservation methods included in this authorization for take and the Conservation Plan, and the understanding that vulnerability and recovery information on the species remains limited; it is the conclusion of the Department that the taking anticipated as a result of this project will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois.

5. Any measures required under Section 5.5(b)(6) of the Act will be performed.

Additional measures are listed below under "Authorization". This authorization is, by definition, subject to those terms and conditions and the signature of a representative from BSW indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application.
3. Public notice of BSW's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on June 26, 2019, the *Bureau County Republican*, and the *Dixon Telegraph* on June 26, July 3, and July 13, 2019. A copy of the Conservation Plan was deposited in two locations, the Walnut Public Library and Amboy Public Library, allowing for public review. The deadline for public comment was August 12, 2019. No comments were received from the public.

Authorization

It is the determination of the Department that the measures to be implemented by BSW will adequately minimize and mitigate the anticipated taking of Blanding's Turtles and Ornate Box Turtles associated with repowering the Big Sky Wind Farm in Lee and Bureau Counties in Illinois. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of Blanding's Turtle or Ornate Box Turtles in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species existence in Illinois.

All terms and conditions included in the aforementioned Conservation Plan submitted by BSW to the Department are incorporated into this agreement by reference and are made a part thereof.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5] and the Administrative Rules for the Incidental Taking of Endangered and Threatened Species [Ill. Adm. Code 1080.40(b)], this authorization is issued subject to the following terms and conditions, which may include additions or modifications to the minimization and mitigation measures proposed by BSW in the Conservation Plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of **thirty (30) years** from the date of the Department signature, unless terminated by written agreement of both parties.

Notwithstanding the above paragraph, due to the length of this Authorization, the Department reserves the right to reassess the terms of this Authorization every five years. If during reassessment the Department determines that the species have become more imperiled than when the species and impact analyses were initially conducted, the Department may request an amendment to this Authorization or additional mitigation by BSW. If the Department and BSW cannot reach an agreement, this Authorization will be terminated. Termination of this Authorization under this provision does not prevent BSW from applying for a new Incidental Take Authorization for this project.

This authorization may be revoked pursuant to the Act and Ill. Adm. Code 1080.80(b) if the Department finds that BSW has failed to comply with any of these terms and conditions or has been responsible for the taking of Blanding's Turtles or the Ornate Box Turtles beyond that which is incidental to repowering and ongoing operations and maintenance traffic at the Big Sky Wind Farm in Lee and Bureau Counties in Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between BSW and the Department. The Illinois Endangered Species Protection Board shall be notified of such alteration.

Any substantive changes, including but not limited to a change in the project footprint or a change in the State-listed species which could potentially be affected, will require that a new Conservation Plan be submitted to the Department to initiate the review and public notice process as required by the Act.

3. This authorization may only be transferred upon approval and written authorization by the Department.
4. Notification to all on-site personnel shall be provided on the sensitive biological resources in the area; the identification of the Blanding's Turtle and the Ornate Box Turtle; regulations protecting the species; where the species might be found; avoidance areas; travel restrictions for equipment; how to report sightings or incidents that may involve take; the importance of avoiding take of the species; and response protocol if the species are found, including the chain of response personnel. **BSW shall submit a copy of the education materials to the Department.**
5. The Department reserves the right of entry by its staff or representatives to inspect potential habitat and species management practices.
6. Biological consultants employed by BSW shall hold the necessary permits for work with non-listed and listed species; these include an Illinois Department of Natural

Resources (IDNR) Scientific Collection Permit as authorized under 17 Illinois Administrative Code 520, an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070, and a Herptile Scientific Permit as authorized under 17 Illinois Administrative Code 885.

7. BSW shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of the wind project. A **project status report** shall be submitted to the Department within **90 days** following completion of each stage (completion defined as wind farm is contributing electricity to the grid) summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness or status of those measures and shall include a project photo log. The report shall also include a map and GPS coordinates of any listed species found within the project footprint, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed. The report shall also include the number of the fifth turbine that was decommissioned.
8. Notification of any Blanding's Turtle or Ornate Box Turtle present during the performance of the project shall be reported electronically to the Department within 48 hours of discovery accompanied by location information (photograph, map, and GPS coordinates).
9. Any discoveries of additional State-listed species beyond those identified in this agreement **halts work** on construction and shall be reported to the Department within 48 hours accompanied by location information.
10. BSW shall conduct, or cause to be conducted, the following pre-construction, construction, and/or post-construction efforts in all areas:
 - a. Turbines 20, 21, 22, and 28 shall be decommissioned and not reconstructed. Either turbine 3 or 74 will be decommissioned and not reconstructed.
 - b. All aerial components of the 5 decommissioned turbines shall be removed; the foundation pads shall remain.
 - c. BSW shall post signage in construction areas (e.g., turbine access roads, construction access routes, laydown areas, etc.) alerting construction personnel to the presence of turtles in the area.
 - d.
 - e. Construction personnel shall be made aware of the possible presence of Ornate Box Turtle and Blanding's Turtle in the vicinity of the Project and asked to watch for turtles within the construction zone or on access roads and adjacent public roadways.
 - a. Access roads shall have a speed limit of 15 mph for all vehicle traffic, including operations and maintenance traffic.
 - b. If observed on public roads, contractors and staff will be instructed to avoid running the animal over.

- c. Any Blanding's Turtle or Ornate Box Turtle observations will be immediately reported to the Big Sky site manager.
- f. A qualified biological monitor shall be on site for monitoring exclusion fence, access roads and crane paths to turbines, during collector line upgrades and relocate any turtles, and periodically checking public roads for turtles, including mortalities.
- g. Access roads and foundation areas will be temporarily widened to facilitate the repowering construction. After repowering is complete, the access roads shall be returned to their current width of 16 feet, and the foundation areas shall be returned to their current width of 60 feet.
- h. The following efforts refer to 14 specific turbines (Turbines T78, T81, T84, T86, T87, T95, T96, T97, T98, T99, T100, T111, T124, and T125) that have been identified to pose the greatest risk of take of Ornate Box Turtles and Blanding's Turtles during their active season (April 15 – October 30):
 - a. Exclusion fences (i.e., silt fence) shall be installed around turbine foundations
 - i. The fencing shall be installed with turn-back wings at each open end facing away from the construction area. The silt fence shall be buried six (6) inches in the ground and staked and maintained in an upright position.
 - ii. A biological monitor shall be on site during silt fence installation to visually inspect the area and relocate any turtles within the workspace
 - iii. In areas where silt fence is used for exclusion fencing, the fence shall be removed only after all repowering and restoration activities in that area have been completed or the active season (April 15 – October 30) ends.
 - b. The biological monitor shall conduct visual encounter searches (VES) immediately ahead of repowering activities to locate turtles within the construction corridor and re-locate them outside the construction area.
 - c. If miscellaneous excavation or trenching is required, a biological monitor shall accompany the construction crew to re-locate turtles found during installation activities. The biological monitor shall conduct a visual encounter search within the construction corridor immediately ahead of the construction crew to locate turtles within the construction corridor and re-locate them outside the construction area. If a turtle nest is unearthed by the trenching activities, trenching will cease at that location, and the biological monitor will report the observation to the Big Sky site manager.
- i. Prior to implementation of this measure, Big Sky shall prepare a turtle relocation plan that will be submitted to the IDNR for approval.
- j. If temporary stream crossings are needed, they shall be covered under Nationwide Permit 33. Big Sky must coordinate with the U.S. Army Corp of Engineers (USACE) once temporary stream crossing locations have been determined.

- k. If temporary stream crossings are implemented, they will be removed following repowering, and each stream crossing will be returned to pre-construction conditions.
- l. Crane paths that are no longer in use shall be decompacted to allow loose soil conditions required by the turtles, if allowed by the landowner **AND** if doing so will not damage environmentally sensitive areas.
 - a. Upon completion, areas temporarily disturbed by the repowering because of movement of construction equipment, miscellaneous excavation and trenching activities, access road widening, and crane paths will be returned to pre-construction conditions. Disturbed areas under active agricultural use would resume agricultural production. Non-cultivated areas would be reseeded with native vegetation (e.g., big bluestem, Indian grass) or other suitable seed mix based on existing vegetation.

The following conservation measures will be implemented by BSW to avoid or minimize impacts to the Ornate Box turtle for construction activities outside of the Ornate Box turtle's active season (October 30 – April 14):

Although Ornate Box Turtle habitat does include cropped areas, the turtles are less likely to use actively cropped areas for hibernation. Therefore, where excavation is occurring between October 30 and April 14 in areas observed to be actively cropped the growing season prior to repowering, the presence of a biological monitor will not be required.

11. BSW shall conduct, or cause to be conducted, one post-construction monitoring effort for turtles:

Specifically, BSW will fund a post-construction presence absence survey utilizing either turtle dogs or trapping surveys within the project area for Ornate Box Turtle and Blanding's Turtle on private property that contains highly suitable habitat, at a cost of up to \$25,000.

A study plan including specific survey methods will be submitted to IDNR prior to the start of the survey and the survey will be conducted after repowering is complete, but within the permit term.

12. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:

- a. BSW will fund mitigation at a total cost of \$62,563, which will be split into two separate payments.
 - i. A \$10,000 donation will be made to the Middle Rock Conservation Partners and specifically earmarked for Ryan Wetland & Sand Prairie Land and Water Reserve to help protect the natural area that provides highly suitable habitat for the Ornate Box Turtle and Blanding's Turtle.
 - ii. The remaining \$52,563 will be paid to Middle Rock Conservation Partners for restoration of habitat.

- b. Evidence of the payment of the mitigation shall be provided to the Department **within 90 days of execution of this agreement**. Mitigation payments are nonrefundable, including events of revocation or termination.

Mitigation values are based on the Department's best current understanding of the species life history needs and impact analysis relevant to the project site's proposed conceptual design elements available at the time of review.

13. All reports, notifications, and other project documentation shall be submitted to:

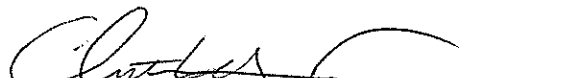
Illinois Department of Natural Resources
Office of Resource Conservation
Endangered Species Program – Incidental Take Authorization Coordinator
One Natural Resource Way
Springfield, IL 62702-1271

(217)557-8243
DNR.ITAcordinator@illinois.gov

The Department's Endangered Species Program shall provide all reports required under this agreement to the Illinois Endangered Species Protection Board and to the Department's Natural Heritage Database.

14. The BSW official identified below is authorized to execute this agreement. Execution by BSW indicates acceptance of all terms and conditions described in this authorization.
15. The execution of this agreement does not waive or excuse the responsibilities of BSW to comply with other Federal, State, or local regulations, including but not limited to obtaining any required permits for the execution of this project.

For the Illinois Department of Natural Resources:


Mr. Christopher L. Young, Director
Office of Resource Conservation

Date

8/5/2021

For Big Sky Wind LLC:

R. Andrew de Pass
Digitally signed by R. Andrew de Pass
DN: cn=R. Andrew de Pass, c=US,
o=Vitol Inc., ou=Renewables,
email=adp@vitol.com
Date: 2021.07.28 14:55:21 -05'00'

Mr. Andrew De Pass, Officer
BSW LLC

Date

July 28, 2012