



United States Department of the Interior

FISH AND WILDLIFE SERVICE
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July 11, 2025

Benjamin Deetsch
RES Kentucky, LLC
2307 Greene Way, Suite B
Louisville, Kentucky 40220

Subject: FWS 2025-0039445; EKPC Big Hill 69kV Substation and Tap Line Project;
Madison and Jackson Counties, Kentucky

Dear Benjamin Deetsch:

The U.S. Fish and Wildlife Service's (Service) Kentucky Field Office (KFO) has reviewed the request for technical assistance for the above-referenced project received by our office on May 27, 2025. East Kentucky Power Cooperative (EKPC) is proposing to construct a new substation and transmission line in Madison and Jackson Counties, Kentucky. EKPC plans to request financing and seek environmental approval from the U.S. Department of Agriculture (USDA), Rural Utilities Service (RUS) for the proposed project. Because EKPC plans to apply for project financing assistance from RUS, the proposed project constitutes a federal action subject to review in accordance with Rural Development's (RD) *Environmental Policy and Procedures* for implementing the National Environmental Policy Act (7 CFR Part 1970) and Section 7 of the Endangered Species Act (16 U.S.C. 1531 et seq.). The KFO offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Project Description

EKPC is proposing to construct, operate, and maintain the Big Hill 69 kilovolt (kV) Substation and Tap Line Project located southeast of Berea, Kentucky. The proposed substation will be sited within an historically agricultural field 0.6 mile east of the intersection of Ky Hwy 421 and Ky Hwy 594 (Red Lick Road), roughly 0.5 mile north of Pilot Knob (37.569809°N, -84.195253°W). The site currently includes a manufactured home, barn, septic system, and leach field. Grading and construction associated with development of the proposed substation facility and roughly 1,100-foot-long entrance drive is expected to create up to 3.0 acres of ground disturbance, with the completed substation occupying roughly 0.5 acre. It is estimated that the tallest portions of the new steel substation structure will be 41 feet above-ground-level (AGL), with a 10-foot-tall lightning mast extending to 51 feet AGL.

The proposed project will also include the construction of an approximately 8.3-mile-long tap line to the south, connecting the new substation to the existing EKPC Three Links - McKee 69

kV transmission line. The proposed tap point will be located on the north side of Johnson Road, roughly 1.0 mile east of the community of Three Links, Kentucky (37.467573°N, -84.172216°W). Based on the preliminary engineering design, approximately 58 single and double, steel-pole structures, with approximate above ground heights of 70-80 feet and typical spans of roughly 780 feet, will be used to construct the new line.

Construction of the proposed project will require the removal of nearly all trees and other woody-stemmed vegetation within the proposed 100-foot-wide right-of-way (ROW) easement. EKPC project engineers also utilized Light Detection and Ranging (LIDAR) data to analyze the project area, which identified trees located along the edges of the proposed transmission line ROW easement that could pose a potential threat to the future operation of the transmission line. As part of this project, EKPC will field verify and clear these hazard trees. Conversely, seven areas of the ROW easement within the steeper valleys of Horselick Creek and six unnamed tributaries will not require tree clearing or any construction activities, given the sufficient vertical clearances of the tap line crossing provided by the existing topography.

A 300-foot-wide study corridor (150 feet on each side of the proposed tap line) was evaluated to allow for potential minor changes to the tap line alignment. Within the study corridor is a 100-foot-wide corridor (50 feet on each side of the proposed tap line) that is designated as the project corridor. Access for construction of the proposed tap line will maximize the use of existing public and private roads in the project area, but some access roads may require improvement or new construction for installation and maintenance equipment. Roughly 6.2 miles of access roads will be improved or constructed for the tap line, which will be roughly 15 feet in width. A 33-foot buffer has been established to allow for potential changes in the access road location.

The study corridor consists of agricultural fields, mixed-age woods, and open field habitats. The northern portion of the corridor consists of agricultural fields and open fields with steep, rolling hills dissected by small streams and drainages, with areas of mixed-age woods in the lower elevations. The mixed-age woods habitat begins to dominate the study corridor as it continues southward.

Federally Listed Species

On behalf of EKPC, RES Kentucky, LLC (RES) has determined that the proposed project will have “no effect” on Short's bladderpod (*Physaria globosa*) based on lack of suitable habitat within the study corridor. There is no requirement to request technical assistance for a “no effect” determination; however, the KFO acknowledges this determination and has no additional comments or concerns regarding this species. RES has also determined that the proposed project has the potential to affect the gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), Virginia big-eared bat (*Corynorhinus townsendii virginianus*), Cumberland bean (*Villosa trabalis*), fluted kidneyshell (*Ptychobranchus subtentus*), and littlewing pearl mussel (*Pegias fabula*). A habitat assessment was conducted within the study corridor by RES biologists on April 1, 2, 3, 15, and 16, August 7, and November 25 and 28, 2024, to identify general habitat types and suitable habitat for federally listed species.

Gray Bat

No caves or quarries were identified within the study corridor. Coal mining does occur in this portion of Kentucky, and no mine portals or adits were observed within the study corridor. Several rock outcrops and overhangs were observed within the 100-foot-wide project corridor; however, due to the existing topography, these areas will be spanned by the transmission line, and no impacts are anticipated to these features or the valley bottoms. Based on these results, no effects to hibernating or roosting gray bats or their hibernacula or roosting habitat are anticipated as a result of the proposed project.

The perennial streams, larger intermittent streams, and open water ponds within the study corridor provide suitable foraging and commuting habitat for the gray bat. There will be no direct impacts within these waterbodies associated with construction activities (i.e., equipment in stream channel). Furthermore, to avoid and minimize potential impacts to gray bat foraging and commuting habitat during construction, EKPC will prepare, implement, and maintain a Storm Water Pollution Prevention Plan that outlines how and where Best Management Practices (BMPs) will be used to prevent or reduce the discharge of pollutants. The smaller intermittent and ephemeral streams in the study corridor do not provide suitable foraging habitat due to their small size, vegetative clutter, lack of consistent flow, and absence or minimal amount of epifaunal substrate for aquatic insects.

Construction of the proposed transmission line will necessitate the removal of all trees and other woody stemmed vegetation within the 100-foot-wide ROW easement, including small forest blocks, along linear corridors (i.e., fence rows, roadways, and streams), and within large contiguous wooded areas. Removal of trees within these forest blocks will result in minimal fragmentation of potential travel corridors; however, this clearing will not result in the isolation of forest blocks or other areas of forested habitat based on the overall minimal impacts from a 100-foot-wide linear project within a largely agricultural and forested landscape. In addition, these impacts will occur during the winter when bats will be in hibernation, which will avoid any potential direct effects. Based on these factors, potential effects to the gray bat from impacts to foraging and commuting habitat are considered insignificant.

Based on the lack of potential hibernacula and roosting habitat in the study corridor and insignificant effects from impacts to foraging and commuting habitat, we agree with your determination that the proposed project “may affect, is not likely to adversely affect” the gray bat.

Indiana Bat and Northern Long-eared Bat (NLEB)

No caves, abandoned mines, sinkholes, or other potential hibernacula or non-forested roosting habitat for the Indiana bat or NLEB are present in the study corridor. In addition, no bridges, culverts, or other features that could be used as non-forested roosting habitat by these species were identified in the study corridor during the assessment. Although rock shelters were identified in the study corridor, these features do not exhibit the criteria required for suitable hibernacula or non-forested roosting habitat. Based on these results, no effects to hibernating or non-tree roosting Indiana or NLEBs or their hibernacula or non-forested roosting habitat are anticipated from the proposed project.

The proposed project will include clearing a total of 82.58 acres of suitable summer roosting, foraging, and commuting habitat for the Indiana bat and NLEB. Based on impacts to suitable summer roosting, foraging, and commuting habitat, we agree with your determination that the proposed action “may affect, is likely to adversely affect” the Indiana bat and NLEB.

The project proponent has chosen to make a voluntary payment to the Imperiled Bat Conservation Fund (IBCF) as part of the proposed project to address Indiana bat and NLEB habitat loss. A voluntary payment to the IBCF is a conservation measure that is identified in the KFO’s 2016 Revised Conservation Strategy for Forest-Dwelling Bats (Conservation Strategy). The proposed project is located within “Known Swarming 1” habitat for the Indiana bat and “Known Swarming 2” habitat for the NLEB. Because the entire project is located within “Known Swarming 1” habitat for the Indiana bat and per the Conservation Strategy, the higher mitigation multiplier associated with “Known Swarming 1” habitat will be used. The applicant proposes to remove 82.58 acres of habitat during the unoccupied timeframe, November 15 to March 31. Based on the Conservation Strategy, the voluntary payment to the IBCF should be \$656,511.00¹.

We have determined that the proposed action is consistent with the actions evaluated in the 2015 Biological Opinion: Kentucky Field Office’s Participation in Conservation Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat (BO) that supports the Conservation Strategy. Any incidental take of Indiana bats or NLEBs resulting from forested habitat removal is not prohibited. The BO concludes that this incidental take is not likely to jeopardize the continued existence of the Indiana bat or NLEB.

To complete the voluntary IBCF payment, the project proponent should mail a check or money order to the Kentucky Natural Lands Trust, which administers the IBCF. The check or money order should be made payable to Kentucky Natural Lands Trust with “Imperiled Bat Conservation Fund” in the memo line. Payments can only be received by standard mail or USPS Priority Mail at the address below. Please note that KNLT cannot provide a signature upon delivery. Payment cannot be received by other delivery services (i.e., FedEx, UPS, etc.).

Mail to:

Imperiled Bat Conservation Fund
c/o Kentucky Natural Lands Trust
433 Chestnut Street
Berea, KY 40403

A cover letter should be included with the check or money order with the following information: the project proponent’s name, the FWS action code referenced in the subject line of this letter, and a contact name and email address for receipt of payment.

¹ The calculated amount is based on the current average value of farm real estate in Kentucky published annually by the U.S. Department of Agriculture in the Land Values and Cash Rents document (\$5,300). Project review requests received after September 1 will be calculated using the new average value.

Virginia Big-eared Bat (VBEB)

Several areas of cliff line habitat were identified in the study corridor; however, further evaluation of these features found that these cliff lines did not exhibit the criteria of suitable hibernacula for the VBEB. No other potential hibernacula were identified in the study corridor. Although not prototypical VBEB habitat, sandstone rock shelters, overhangs, and crevices were identified along the cliff lines in the study corridor that could provide potential summer roosting locations. These areas of cliff line habitat were thoroughly investigated, and no VBEBs or signs of summer use (i.e., guano, insect wings, staining, etc.) were discovered in any of the potential roost locations. Due to the low quality of the observed potential roost sites, lack of evidence of VBEB use, and the disjunct nature of this suitable habitat from other higher-quality cliff line habitat in Jackson County to the south and east, it is unlikely that VBEB are utilizing the habitat within the project area. Additionally, EKPC identified seven no-clear zones within the proposed ROW, including the Horselick Creek crossing and six other unnamed tributary crossings, where the proposed transmission line will span these sections of cliff line habitat. Based on the engineering design, approximately 8.12 acres of cliff line habitat will be avoided, and no tree clearing will occur along this cliff line habitat. As a result, no effects to hibernating or roosting VBEBs or their hibernacula or roosting habitat are anticipated from the proposed project.

The mixed-age woods habitat located in proximity to the identified cliff lines in the study corridor was considered suitable foraging and commuting habitat for this species. The proposed project will require the removal of vegetation from the ridgetops adjacent to these areas. However, deeper valleys will be spanned, and no tree clearing will occur below the top of the cliff line areas. Furthermore, removal of trees within the forest blocks will result in minimal fragmentation of potential travel corridors, and clearing will not result in the isolation of forest blocks or other areas of forested habitat. Based on these factors, potential effects to the VBEB from impacts to foraging and commuting habitat are considered insignificant.

Based on the lack of potential hibernacula and roosting habitat in the study corridor and insignificant effects from minor impacts to foraging and commuting habitat, we agree with your determination that the proposed project “may affect, is not likely to adversely affect” the VBEB.

Federally Listed Mussels

Suitable habitat for the three federally listed mussel species in the study corridor is limited to the perennial streams. No construction activities will occur in the perennial streams; therefore, no direct impacts are anticipated. As previously discussed, BMPs will be utilized during construction to prevent and reduce the discharge of pollutants into streams. Based on the lack of direct impacts to perennial streams and BMPs to minimize indirect impacts, we agree with your determination that the proposed project “may affect, is not likely to adversely affect” federally listed mussels.

Federally Proposed Species

RES has determined that the proposed project may affect the tricolored bat (*Perimyotis subflavus*), eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), Cumberland moccasinshell (*Medionidus conradicus*), salamander mussel (*Simpsonaias ambigua*), and Tennessee clubshell (*Pleurobema oviforme*).

Tricolored Bat

One tricolored bat was observed roosting in a crevice in a cliff line within the study corridor. The crevice lacks a dark zone and does not provide other necessary characteristics to be considered a hibernaculum; however, the crevice does provide suitable summer day/night roosting habitat for this species. No project activities or tree clearing will be performed within the cliff line area where the tricolored bat was observed, as this area will be spanned by the transmission line. In addition, no abandoned underground mines, bridges, culverts, or other features that could be used as hibernacula or non-forested roosting habitat by this species were identified in the study corridor during the assessment. Two additional tricolored bats were identified outside the study corridor within a cave to the west and south of the corridor; however, this cave will not be impacted by the proposed project. Based on these factors, no effects to hibernating tricolored bats or their hibernacula are anticipated from the proposed project. Additionally, potential effects to this species from impacts to non-forested roosting habitat are considered discountable.

The proposed project will require clearing of 82.58 acres of suitable summer roosting, foraging, and commuting habitat for the tricolored bat during the unoccupied timeframe (November 15 – March 31), which will avoid the pupping season of May 15 – July 31. Removal of suitable habitat during the unoccupied timeframe will not result in any direct effects to the species. As a result, potential effects to the tricolored bat from impacts to summer roosting, foraging, and commuting habitat are considered insignificant.

Based on the lack of potential hibernacula in the study corridor, discountable effects from impacts to non-forested roosting habitat, and insignificant effects from impacts to summer roosting, foraging, and commuting habitat, we agree with your determination that the proposed project is “not likely to jeopardize the continued existence” of the tricolored bat.

Eastern Hellbender

Suitable habitat for this species within the study corridor is limited to the perennial streams. No construction activities will occur in the perennial streams; therefore, no direct impacts are anticipated. As previously discussed, BMPs will be utilized during construction to prevent and reduce the discharge of pollutants into streams. Based on the lack of direct impacts to perennial streams and BMPs to minimize indirect impacts, we agree with your determination that the proposed project is “not likely to jeopardize the continued existence” of the eastern hellbender.

Federally Proposed Mussels

Suitable habitat for the three federally proposed mussel species within the study corridor is limited to the perennial streams. No construction activities will occur in the perennial streams; therefore, no direct impacts are anticipated. As previously discussed, BMPs will be utilized during construction to prevent and reduce the discharge of pollutants into streams. Based on the lack of direct impacts to perennial streams and BMPs to minimize indirect impacts, we agree with your determination that the proposed project is “not likely to jeopardize the continued existence” of the federally proposed mussels.

Summary

RES has determined that the proposed project will have “no effect” on Short's bladderpod. The KFO agrees that the proposed project “may affect, is not likely to adversely affect” the gray bat, VBEB, Cumberland bean, fluted kidneyshell, and littlewing pearlymussel. The KFO also agrees that the proposed project “may affect, is likely to adversely affect” the Indiana bat and NLEB and that the action is consistent with the actions evaluated in the 2015 BO. We also acknowledge the use of a voluntary payment to the IBCF as a compensatory mitigation measure for adverse effects to the Indiana bat and NLEB. Additionally, the KFO agrees that the proposed project is “not likely to jeopardize the continued existence” of the tricolored bat, eastern hellbender, Cumberland moccasinshell, salamander mussel, and Tennessee clubshell. If the proposed project is subsequently modified or new information indicates that the proposed project may affect listed species or their habitat in a manner not previously considered, additional coordination with our office may be necessary.

We appreciate the opportunity to review the proposed project. If you have any questions, please contact Taylor Fagin of my staff at taylor_fagin@fws.gov.

Sincerely,

Joshua Lillpop
Acting Field Supervisor