

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY TO)	
CONSTRUCT A 138 KV TRANSMISSION LINE)	CASE NO.
AND ASSOCIATED FACILITIES IN BREATHITT,)	2021-00346
FLOYD AND KNOTT COUNTIES, KENTUCKY)	
(GARRETT AREA IMPROVEMENTS 138 KV)	
TRANSMISSION PROJECT))	

ORDER

On November 8, 2021, Kentucky Power Company (Kentucky Power) filed an application, pursuant to KRS 278.020(2) and 807 KAR 5:001, Section 15, for a Certificate of Public Convenience and Necessity (CPCN) authorizing it to:

1. Construct approximately 15 miles of new 138 kilovolt (kV) transmission line from the Hays Branch 138 kV Substation in Floyd County, Kentucky to the Soft Shell 138 kV Substation in Knott County, Kentucky (Garrett Area 138 kV Transmission Line);
2. Construct the new Eastern 138 kV Substation south of the existing 138 kV Hays Branch Substation in Floyd County, Kentucky;
3. Expand and convert the existing Garrett 46 kV Substation located in Floyd County, Kentucky to a 138 kV Substation;
4. Upgrade three existing Kentucky Power substations:
 - a. The Hays Branch 138 kV Substation in Floyd County,
 - b. The McKinney 46 kV Substation in Floyd County,
 - c. The Soft Shell 138 kV Substation in Knott County;

5. Perform removal work at the Beaver Creek 138/69/46 kV Substation and associated 38 kV transmission line;

6. Perform work at Kentucky Power's delivery point (the Snag Fork Switching Structure) at the East Kentucky Power Cooperative, Inc. (EKPC) Salt Lick 138 kV Substation in Floyd County, Kentucky; and

7. Retire approximately 25 miles of the 46 kV Beaver Creek-McKinney No.1 46 KV circuit, along with the retirement of the Spring Fork Tap, and related work, and the Shepherd and Lackey Switching Stations. Collectively the projects are known as the "Garrett Area Improvements 138 kV Transmission Project."

By Order issued on November 17, 2021, the Commission established a procedural schedule for the orderly processing of this matter and provided a deadline to request intervention. Several requests for intervention were made. On November 12, 2021, Mr. Chalmer Allen filed a request for intervention. On December 7, 2021, the Commission denied Mr. Chalmer Allen's request for intervention. On November 16, 2021, Volney Brent Allen (Mr. Allen) filed a request for intervention. Mr. Allen filed supplements to the request on November 19, 2021, and December 14, 2021. On December 7, 2021, the Commission granted Mr. Allen's request for intervention. On December 7, 2021, Jeffrey Conley on behalf of "Western Pocahontas Properties" filed a request for intervention. On December 20, 2021, the Commission denied Mr. Conley's request for intervention.

Kentucky Power responded to two requests for information from Commission Staff.¹ Kentucky Power issued one request for information to Mr. Allen,² and by letter dated January 14, 2022, Mr. Allen responded. Additionally Kentucky Power filed the rebuttal testimony of Brian K. West³ and George T. Reese.⁴ The Commission chose to conduct a formal conference in this matter rather than a hearing, because the intervenor in this proceeding, Mr. Allen, is not represented by counsel. The Commission determined that a formal conference was appropriate in order to afford the parties an opportunity to present evidence and to respond to questions from the Commission and each other, without adhering to the formalities required by a hearing. A formal conference was held on February 17, 2021. A recording of the conference appears in the record of this proceeding on the Commission's website. Following the conference, Kentucky Power filed responses to a post-conference request for information.⁵ The record is complete and the matter stands ready for a decision.

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that Kentucky Power's request for a CPCN shall be granted subject to the conditions discussed below.

BACKGROUND

¹ Kentucky Power's Response to Commission Staff's First Request for Information (Response to Staff's First Request) (filed Dec. 7, 2021), Kentucky Power's Response to Commission Staff's Second Request for Information (Response to Staff's Second Request) (filed Dec. 28, 2021).

² Kentucky Power's First Request for Information to Brent Allen (filed Jan. 13, 2022).

³ Rebuttal Testimony of Brian K. West (West Rebuttal) (filed Jan. 28, 2022).

⁴ Rebuttal Testimony of George T. Reese (Reese Rebuttal) (filed Jan. 28, 2022).

⁵ Kentucky Power's Response to Commission Staff's Post-Conference Request for Information (Response to Staff's Post-Conference Request) (filed Feb. 28, 2022).

Kentucky Power is a corporation organized on July 21, 1919, pursuant to the laws of the Commonwealth of Kentucky.⁶ Kentucky Power is engaged in the generation, purchase, transmission, distribution and sale of electric power.⁷ Kentucky Power also supplies electric power at wholesale to other utilities and municipalities in Kentucky for resale.⁸ Kentucky Power serves approximately 165,000 customers in the following 20 counties of eastern Kentucky: Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike, and Rowan.⁹

Kentucky Power is a wholly owned subsidiary of American Electric Power Company, Inc. (AEP).¹⁰ AEP is a multi-state public utility holding company that includes utilities providing electric service to customers in parts of eleven states: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia.¹¹

GARRETT AREA IMPROVEMENTS 138 KV TRANSMISSION PROJECT

Kentucky Power proposes to upgrade its transmission system as described below. The proposed components of the project will be executed in Floyd, Knott and Breathitt

⁶ Application (filed Nov. 8, 2021) at 2

⁷ *Id.*

⁸ *Id.* at 3.

⁹ *Id.* at 2–3.

¹⁰ *Id.* at 3.

¹¹ *Id.* See also Case No. 2021-00481, *Electronic Joint Application of American Electric Power, Inc., Kentucky Power Company and Liberty Utilities Co. for Approval of the Transfer of Ownership and Control of Kentucky Power Company* (filed Jan. 4, 2022), Application. Kentucky Power and AEP seek to transfer all issued and outstanding common stock of Kentucky Power to Liberty Utilities Co., a Delaware corporation, which is an indirect subsidiary of Algonquin Power & Utilities Corp.

counties, Kentucky,¹² and are referred to collectively as the “Garrett Area Improvements 138 kV Transmission Project.”¹³ This project is an asset renewal project intended to address reliability and aging infrastructure concerns with Kentucky Power’s 46 kV network in the Garrett, Kentucky area.¹⁴ Additionally, the project will connect two previously approved and constructed 138 kV projects,¹⁵ the Soft Shell 138 kV Transmission Line and the Hays Branch-Morgan Fork 138 kV Transmission Line. The Connection of the Soft Shell 138 kV Transmission line with the Hays Branch-Morgan Fork 138 kV Transmission Line allows for the retirement of 25 miles of deteriorating 46 kV line.¹⁶ The Salt Lick delivery point to EKPC will also be converted to 138 kV.¹⁷

The total functional estimate of the project cost is \$87.2 million.¹⁸ Kentucky Power anticipates funding the cost of the project through its operating cash flow and other internally generated assets.¹⁹ The breakdown of the cost estimate is:

1. Transmission line work, including right-of way acquisition, \$49.1 million;

¹² *Id.*

¹³ Direct Testimony of Brian K. West (West Direct) (filed Nov. 8, 2021) at 4.

¹⁴ *Id.*

¹⁵ Application at 2, and Direct Testimony of Nicholas C. Koehler (Koehler Direct) (filed Nov. 8, 2021) at 17. The Soft Shell 138 kV Transmission Line was approved in Case No. 2007-00430, *Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line and Associated Facilities in Knott County, Kentucky (Soft Shell)* (Ky. PSC Feb. 29, 2008). The Hays Branch-Morgan Fork 138 kV Transmission Line was approved in Case No. 2007-00155, *The Application of Kentucky Power for a Certificate of Public Convenience and Necessity to Construct a 138 kV Transmission Line in Floyd County, Kentucky* (Ky. PSC Aug. 3, 2007).

¹⁶ Koehler Direct at 17.

¹⁷ Application, Exhibit 16, at 3.

¹⁸ West Direct at 10,

¹⁹ *Id.* at 11.

2. Construction and upgrade of the substations and switch structure, \$18.3 million;
3. Retirement of approximately 25 miles of the Beaver Creek-McKinney No. 1 46 kV circuit, \$17.3 million; and
4. Distribution line work to allow retirement of the 46 kV lines and the Spring Fork Substation, \$2.5 million.²⁰

Kentucky Power estimates the annual operating cost for the project will be \$96,400 for general maintenance and inspection.²¹ The projected annual additional ad valorem taxes resulting from the project are expected to be approximately \$803,200.²²

The Proposed Garrett Area 138 kV Transmission Line

The proposed Garrett Area 138 kV Transmission Line will be constructed using single and double-circuit configuration structures traversing Floyd and Knott counties, Kentucky.²³ The Garrett Area 138 kV Transmission Line will begin at the existing Softshell Substation with a proposed single-circuit transmission line proceeding in a northeasterly direction for approximately 6.1 miles to the exiting interconnection point with EKPC near the intersection of Salt Lick and Lick Fork Roads.²⁴ The proposed single-circuit transmission line will continue in the westward direction for approximately 4.2 miles towards the existing Garrett Substation near the intersection of State Route 80 and State

²⁰ *Id.* at 10–11.

²¹ *Id.* at 11–12.

²² *Id.* at 12.

²³ Application at 5.

²⁴ *Id.*

Route 7.²⁵ Approximately 1.75 miles of this 4.2 mile segment of the proposed single-circuit transmission line will parallel the existing Spring Fork Tap 46 kV Transmission Line right-of-way.²⁶ Continuing from the existing Garrett Substation, the proposed single circuit transmission line will proceed in a more northerly direction for approximately 3.0 miles towards to the proposed Eastern 138 kV Substation.²⁷ Diverging from the single-circuit transmission line, the proposed double circuit transmission line will then exit the proposed Eastern 138 kV Substation in the northeasterly direction for approximately 1.4 miles towards a proposed tap structure on the existing Hays Branch-Morgan Fork 138 kV Transmission Line.²⁸

The proposed Garrett Area 138 kV Transmission Line is approximately 15 miles in length. Approximately 13.6 miles of the line will be single circuit 138 kV transmission line. Approximately 1.4 miles of the new 138 kV transmission line will be a double circuit line.²⁹ The project will permit the retirement of approximately 25-miles of the existing Beaver Creek-McKinney No. 1 46 kV Circuit, which is carried on the existing Beaver Creek-Garrett, McKinney-Garrett and Spring Fork Tap Transmission Lines constructed in the 1940's.³⁰ No existing transmission line infrastructure will be rebuilt.³¹

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.* at 6.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

Based on preliminary engineering, Kentucky Power plans to use single circuit galvanized steel monopoles, guyed three-pole structures, and two-pole H-Frames for the Salt Lick-Softshell, Garrett-Salt Lick, and Eastern-Garrett sections of the Garrett Area 138 kV Transmission Line. Single-circuit galvanized lattice steel towers may be used in areas of constraints.³²

Based on preliminary engineering for the Eastern-Hays Branch portion of the proposed line, Kentucky Power anticipates using double-circuit galvanized lattice steel towers and double-circuit monopole structures with davit arms. An additional structure will be constructed as part of the Hays Branch-Morgan Fork 138 kV Transmission Line tap point.³³

Kentucky Power stated that preliminary engineering indicates the average above ground level height of the proposed single-circuit structures will be approximately 85 feet; double-circuit structures will be approximately 120 feet above ground level. Kentucky Power maintained that the structure types selected for this project are the best fit with the landscape (terrain and land use) and are the most economical solution.³⁴

Kentucky Power stated that the H-Frame and lattice tower structures are efficient, cost-effective, simple form, and proven structures that have functioned well over the years on transmission lines of all voltages. Additionally, Kentucky Power stated that these

³² Application at 9.

³³ *Id.*

³⁴ *Id.*

structures enable long spans, which makes them well-suited for mountainous terrain and rural landscapes.³⁵

Kentucky Power claimed that the proposed single-circuit structures will support three conductors and two overhead groundwires. Kentucky Power stated that the proposed double-circuit structures will support six conductors and two overhead groundwires. Further, Kentucky Power asserted that the conductors will consist of 1033.5 kcmil Aluminum Conductor Steel Reinforced conductors; the overhead groundwires will consist of one Alumoweld wire and one fiber optic overhead groundwire, which will be used for relaying communications between stations.³⁶

The Proposed Eastern 138 kV Substation

The proposed Eastern 138 kV Substation will be located in Floyd County, Kentucky approximately 0.50 miles south of the existing Hays Branch 138 kV Substation and north of the existing Garrett 46 kV Substation.³⁷ The Eastern 138 kV Substation will be located on a 4.373 acre site. It is designed to be a 138 kV ring bus station with three line exits.³⁸ Initially, it will contain three 138 kV (3000 A 40 kA) circuit breakers and a 16-foot x 27-foot Drop In Control Module (DICM). The circuit breakers will be located on exits toward the Morgan Fork 138 kV Substation and the upgraded Garrett 138 kV Substation.³⁹

The Proposed Garrett 46 kV Substation Upgrade

³⁵ *Id.*

³⁶ *Id.*

³⁷ Application at 6.

³⁸ *Id.*

³⁹ *Id.*

Kentucky Power proposed to upgrade the existing Garrett 46 kV Substation to a 138 kV Substation.⁴⁰ The substation upgrades will include a modified vertical 138 kV ring bus; two 138 kV circuit breakers on the line exits; one 138/12 kV 30 MVA transformer; and one 138 kV circuit switcher.⁴¹ Kentucky Power also proposed to install a new 16-foot x 27-foot DICM.⁴²

Kentucky Power proposed to expand the footprint of the Garrett 46 kV Substation through the acquisition of a 4.131 acre tract in connection with its upgrade of the existing station to a 138 kV Substation.⁴³

The Proposed Snag Fork Switching Structure

The Kentucky Power proposed Snag Fork Switching Structure will be located near the existing EKPC Salt Lick 138 kV Substation in Floyd County Kentucky. The Snag Fork Switching Structure will consist of a three-way automated (phase-over-phase) switching structure and will serve as a delivery point to the Salt Lick 138 kV Substation.⁴⁴

The Proposed Work at Other Substations

Kentucky Power proposed to install a 138 kV (3000 A 40 kA) circuit breaker in the Soft Shell 138 kV Substation with an exit (via Snag Fork) towards the proposed Garrett 138 kV Substation. The EKPC Salt Lick Substation currently is a 46 kV substation. It will be upgraded by EKPC to a 138 kV substation.⁴⁵

⁴⁰ *Id.* at 7.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

Kentucky Power also proposed to relocate and reuse the existing 69 kV Circuit Breaker B located in the McKinney 46 kV Substation to the Beaver Creek-McKinney No.2 Circuit exit at the McKinney 46 kV Substation. Kentucky Power proposes to remove the existing 46 kV Circuit Breaker A at the Beaver Creek 138/69/46 kV Substation along with associated equipment. The removal is in connection with the retirement of the Beaver Creek-McKinney No.1 Circuit.⁴⁶

Kentucky Power proposed to perform remote end relaying work at the Morgan Fork 138 kV Substation and the Hays Branch 138 kV Substation. The remote end relays will be installed in existing cabinets in the substations. The work will permit the two substations to communicate with the proposed Eastern 138 kV Substation and upgraded Garrett 138 kV Substation. Kentucky Power maintained that the installation of the relays at the two substations is part of the ordinary course of operating and maintaining Kentucky Power's transmission facilities, and that the installation will improve the reliability and efficiency of the proposed Garrett Area 138 kV Transmission Line.⁴⁷

The Retirement of the Beaver Creek-McKinney No. 1 Circuit

Kentucky Power proposed to retire the Beaver Creek-McKinney No.1 Circuit by removing the poles and conductors.⁴⁸

Other Work

Kentucky Power stated that it will extend its existing distribution system in the usual course of business to serve the Spring Fork area of Breathitt County, Kentucky, including

⁴⁶ *Id.* at 8.

⁴⁷ *Id.*

⁴⁸ *Id.*

approximately 20 existing customers in a small area along Mine Shaft Road. The work is required to accommodate the retirement of the Spring Fork 46 kV Substation and relocate the load to the Haddix 69 kV Substation.⁴⁹

Request for Authority to Move Centerline and Expand the Right-of-Way

Kentucky Power requested the Commission's approval to move the centerline and to expand the right-of-way within the 1,000-foot filing corridor.⁵⁰ Kentucky Power maintained that it needs this flexibility to ensure it has the ability to address potential issues that may emerge in connection with ground surveys, final engineering, and right-of-way negotiations.⁵¹ Kentucky Power stated that the Garrett Area Improvements 138 kV Transmission Line will be constructed within a new 100-foot right-of-way, except where a wider right-of-way is required to address constructability and operational requirements. Kentucky Power argued that a widened right-of-way may be required for certain longer spans and in steep terrain to permit the safe and efficient operation of the transmission line.⁵² Kentucky Power maintained that the widened right-of-way also would facilitate additional tree clearing to prevent the conductors from coming in contact with trees during high wind conditions and tree clearing on the up-hill side in order to prevent trees from falling down hill and into the conductors and structures.⁵³ Kentucky Power asserted these

⁴⁹ Application at 10.

⁵⁰ *Id.* at 12.

⁵¹ *Id.*

⁵² *Id.*

⁵³ *Id.*

areas of wider right-of-way will be identified during detailed engineering design and will be included during the right-of-way negotiations with landowners.⁵⁴

Kentucky Power stated that its request to move the centerline and right-of-way, or to expand the right-of-way, within the Filing Corridor is made expressly contingent upon Kentucky Power having notified the affected property owners of this proceeding, in accordance with Commission regulation 807 KAR 5:120, Section 2(3).⁵⁵ Kentucky Power stated it plans to begin to acquire rights-of-way in the summer of 2022, and will provide monthly property acquisition status updates to the Commission beginning June 2022.⁵⁶

Financing

Kentucky Power will construct and own the entirety of this project.⁵⁷ The total functional cost of the project is estimated to be \$87.2 million, including transmission line work, right-of-way acquisition, and work for retirement of lines.⁵⁸ Kentucky Power anticipates funding the cost of the Project through its operating cash flow and other internally generated funds.⁵⁹

Kentucky Power's Argument for Necessity

Kentucky Power asserted that this project is driven by Equipment Material/Condition/Performance/Risk, Customer Service, and Operational Flexibility and Efficiency needs in the 46 kV network and the 138 kV network in the area of the Garrett,

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.* at 13.

⁵⁷ Application at 11, and West Direct at 6.

⁵⁸ Application at 11.

⁵⁹ *Id.* and Response to Staff's First Request for Information at 6.

Hueysville, Lackey, and Wayland communities.⁶⁰ The 25-mile long Beaver Creek-McKinney No. 1 46kV Circuit serves EKPC's Salt Lick Substation and Kentucky Power's Spring Fork and Garrett substations, which serve Kentucky Power customers.⁶¹ The circuit is comprised of 152 structures, the majority of which are wood structures dating back to 1929 and 1949.⁶² Kentucky Power maintained there are presently 209 open conditions on the circuit.⁶³ These open conditions include damaged poles and cross-arms, damaged conductor/shield wires, and damaged guy anchor/knee/vee braces.⁶⁴

Kentucky Power reported five permanent outages on the circuit in the last five years.⁶⁵ None of the permanent outages was a direct result of any of the open conditions. Kentucky Power maintained that greater resilience to events such as lightning strikes and trees falling from outside of the right-of-way, which led to the five permanent outages, are covered by current industry codes requiring shield angles providing improved lightning protection and structures meeting increased loading.⁶⁶ Kentucky Power asserted this project will result in a stronger regional electric grid.⁶⁷ Additionally, Kentucky Power

⁶⁰ Koehler Direct at 10.

⁶¹ *Id.*

⁶² *Id.* Twenty-Two of the 152 structures, or 14% of the total number, date to 1929. Sixty-one of the 152 structures, or 40% of the total, date to 1949.

⁶³ Koehler Direct at 10, and Response to Staff's First Request, Item 8a, and See Response to Staff's Post Conference Request, Item 1a. At the time of its application Kentucky Power reported 142 open conditions on the circuit. An update of he reported open conditions revealed that two open conditions had been remediated, but 69 additional open conditions were identified since the original reporting.

⁶⁴ Koehler Direct at 10.

⁶⁵ Response to Staff's First Request, Item 8b, and Response to Staff's Post-Conference Request, Item 1c.

⁶⁶ Response to Staff's Post-Conference Request, Item 1c.

⁶⁷ Koehler Direct at 20.

maintained that by replacing a failing asset and bringing its system up to date, it is meeting its obligation to provide reliable service.⁶⁸

Kentucky Power stated that the Hays Branch 138 kV Substation serves 32 MW of load at Mark West Hydrocarbon's gas compressing operation via an 8.25 mile-long radial line out of Morgan Fork Station.⁶⁹ Kentucky Power stated that radial feeds require outages to customers served from the radial for any maintenance activities or unplanned outages associated with the equipment or the line serving the customer.⁷⁰ Looping service provides for limited load transferability during outages, and provides better continuity of service than a radial system.⁷¹ Kentucky Power stated that the proposed project will also provide loop service to the Salt Lick delivery point, which provides service to EKPC-affiliated Big Sandy Rural Electric Cooperative Corporation (Big Sandy RECC) that serves 4.75 MVA of load. Kentucky Power stated that it considers this delivery point a single "customer," but Big Sandy RECC serves multiple customers from its distribution system connected to that delivery point. Kentucky Power stated that the proposed project improves the reliability of its system.

Alternative to the Proposal

As an alternative to the proposed project, Kentucky Power stated that it considered addressing the deteriorating condition of the Beaver Creek-McKinney No. 1 46 kV Circuit by rebuilding the 46 kV circuit, constructing a 6.5-mile 138 kV transmission line from the

⁶⁸ *Id.* at 21.

⁶⁹ *Id.* at 10–11.

⁷⁰ *Id.* at 11.

⁷¹ Response to Staff's First Request, Items 9a and 9b.

Stanville 138 kV Substation, and converting 3.5 miles of existing 138 kV single-circuit transmission line to a 138 kV double-circuit transmission line.⁷² Kentucky Power stated that it rejected this alternative as unreasonable because of its projected cost of \$105 million, which is approximately 20 percent more than the cost of the proposed project.⁷³ This alternative would have required Kentucky Power to maintain a 46 kV system at 46 kV operating voltage even though the system would be built and designed to 69 kV standards.⁷⁴ In addition, this alternative would cost more in operation and maintenance expense than the proposal,⁷⁵ and would not address reliability for customers served by the Spring Fork Substation or Salt Lick delivery point.⁷⁶

INTERVENOR'S CONCERNS

Mr. Allen owns property over which the proposed Garrett Area 138 kV Transmission Line will cross.⁷⁷ He objected to the transmission line crossing his property at the location Kentucky Power proposed, and he expressed concerns about the effect the project may have on his property.

Kentucky Power has not Surveyed the Allen Property

⁷² Application at 18.

⁷³ *Id.*

⁷⁴ Koehler Direct at 19.

⁷⁵ *Id.* at 20.

⁷⁶ *Id.* at 19.

⁷⁷ Specifically, Mr. Allen owns two parcels crossed by the proposed right-of-way, Parcel No. 028-00-00-033.04 and Parcel No. 028-00-00-033-02. Kentucky Power's application refers to these as "Parcel 5" and "Parcel 6," respectively. The parcels are contiguous and each parcel lies on both sides of State Route 680. See West Rebuttal at 3.

Mr. Allen alleged that Kentucky Power has not surveyed his property.⁷⁸ Kentucky Power confirmed it has not surveyed Mr. Allen's property.⁷⁹

Allegation of Political Contribution Influencing the Route

Mr. Allen alleged Kentucky Power has gone out of the way to avoid placing its proposed transmission line on property owned by two millionaires.⁸⁰ Further Mr. Allen alleged Kentucky Power did this because of political contributions.⁸¹

Kentucky Power argued that the proposed route was chosen over the route that Mr. Allen alleges Kentucky Power removed from consideration due to political influence because it (1) is shorter; (2) crosses fewer parcels; (3) crosses fewer landowners; (4) requires less tree clearing; (5) is more easily constructed; and (6) requires fewer structures.⁸² Kentucky Power denied the choice of the proposed route was influenced by political considerations.⁸³

The Indiana Bat

Mr. Allen alleged there are Indiana bats living on his property, that the Indiana bat is an endangered species, and that the construction of the proposed transmission line will disturb the bats.⁸⁴ Mr. Allen did not supply any documentary evidence to support this assertion.

⁷⁸ Brent Allen's Request for Intervention (filed Nov. 16, 2021).

⁷⁹ West Rebuttal at 4.

⁸⁰ Brent Allen's Request for Intervention.

⁸¹ *Id.*, See also Allen Conference Exhibits 3 and 4 (filed Feb. 18, 2022).

⁸² Kentucky Power's Response to Brent Allen's Motion (Response to Brent Allen's Motion) (filed Nov. 23, 2021) at 4; and Direct Testimony of George T. Reese (Reese Direct) (filed Nov. 8, 2021) at 19.

⁸³ West Rebuttal at 6.

⁸⁴ Brent Allen's Request for Intervention; Brent Allen's Additional Information (filed Jan. 18, 2022).

Kentucky Power stated that it has not conducted field studies of Mr. Allen's property to determine the presence of threatened or endangered species.⁸⁵ However, it has conducted a review of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) online tool and has coordinated with the Kentucky Department of Fish and Wildlife Resources (KDFWR) and the Kentucky Office of Nature Preserves concerning species and resources of concern that may occur in the project study area. Based on this review, a number of species of concern, including the Indiana bat, were identified as potentially occurring in the project study area.⁸⁶ In addition, Kentucky Power stated that bat portal studies were conducted relative to the expansion of the Garrett Substation in 2021 to accommodate its construction schedule.⁸⁷ Kentucky Power stated that after a proposed route is approved, it will initiate consultation with USFWS and the KDFWR and conduct additional investigations, if necessary. Kentucky Power argued that if Indiana bats are documented during field studies along the project it would consult with USFWS in order to avoid and minimize effects to the species.⁸⁸ Kentucky Power stated that avoidance and minimization measures would be based on the specific data resulting from any subsequent bat studies.

Specifically, Kentucky Power asserted that if Indiana bats are discovered on or in the vicinity of Mr. Allen's property, it will notify the USFWS and the KDFWR of the capture(s).⁸⁹ If bats are captured during summer mist netting surveys, the captured bats

⁸⁵ Reese Rebuttal at 4.

⁸⁶ *Id.* at 3.

⁸⁷ *Id.*

⁸⁸ *Id.* at 4–5.

⁸⁹ *Id.*

are typically radio-tracked to determine detailed habitat use of the surrounding landscape.⁹⁰ If bats are documented as using any underground features, such as caves or mines, during fall or spring, USFWS and KDFWR will be consulted to determine the most appropriate steps to avoid and minimize effects to that particular habitat.⁹¹

Kentucky Power stated that it will comply with all environmental and other requirements in carrying out the CPCN, if it is granted.⁹²

Historical Artifact

Mr. Allen alleged that a historical artifact, referred to by Mr. Allen as the “Daniel Boone rock,” is in the path of proposed transmission line.⁹³ Mr. Allen explained that the rock was inscribed by Daniel Boone in 1775, and that this is documented in the Morehead State Archives.⁹⁴

Kentucky Power stated that as part of the siting study, it conducted a review of previously recorded resources utilizing digital files of architectural and historical resources from the Kentucky Heritage Council, as well as digital files of archaeologically significant resources from the Kentucky Office of State Archaeology.⁹⁵ Following Mr. Allen’s initial statement regarding the presence of the inscribed rock located on his property, Kentucky Power examined on-line resources at the Kentucky Historical Society and the Morehead

⁹⁰ *Id.*

⁹¹ *Id.* at 5.

⁹² Response to Brent Allen’s Motion at 4.

⁹³ Brent Allen’s Request for Intervention.

⁹⁴ *Id.*

⁹⁵ Reese Rebuttal at 6.

State University Archives, including the *Floyd County Times*.⁹⁶ Kentucky Power stated that it found references to the existence of a rock inscribed by Daniel Boone located in Floyd County in a book entitled *Kentucky's Last Frontier*, by Henry P. Scalf.⁹⁷ However, the book did not indicate an exact location of the rock.⁹⁸

Kentucky Power stated that a Phase I cultural resources survey will be conducted and coordinated with the Kentucky Heritage Council and the Kentucky Office of State Archaeology (collectively serving as the State Historic Preservation Office (SHPO)) during later phases of project development.⁹⁹ If the inscribed rock is located within the area of potential effect for the project, it will be documented and the findings submitted to the SHPO for review and comment.¹⁰⁰ If an inscribed rock is determined significant by the SHPO, an avoidance plan will be implemented.¹⁰¹

Presence of a Natural Gas Pipeline

Mr. Allen alleged that Diversified Gas Company has an 8-inch natural gas pipeline on top of the ground on his property.¹⁰²

Kentucky Power stated that the published data and its review of aerial photography do not identify a gas pipeline on Mr. Allen's property.¹⁰³ However, Kentucky Power stated

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.*

⁹⁹ *Id.* at 8.

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² Brent Allen's Request for Intervention.

¹⁰³ Reese Rebuttal at 9.

that it plans to coordinate with utility companies, to review property easement records as available and conduct on-site investigations during later phases of project development to locate and identify both above ground and buried utilities, including pipelines.¹⁰⁴ If a natural gas pipeline is discovered on Mr. Allen's property, Kentucky Power indicated it will coordinate with the pipeline and surface owners to discuss appropriate avoidance measures.¹⁰⁵ The Company can move structures and the centerline within the filing corridor to avoid paralleling a pipeline within the right-of-way.¹⁰⁶ Kentucky Power asserted that the project will be designed so that no structures are placed within 50 feet of a pipeline.¹⁰⁷

Environmental Damage to Watershed, Ponds and Fish

Mr. Allen alleges he has constructed two ponds on his property and stocked those ponds with fish.¹⁰⁸ Mr. Allen alleges the ponds will suffer irreparable harm from silt and herbicides if the proposed transmission line is built along the proposed route.¹⁰⁹

Kentucky Power stated that a preliminary environmental survey was conducted in spring 2021, and that it will continue to perform and update surveys as necessary to obtain the appropriate environmental permits and approvals before the anticipated state of construction in the third quarter of 2022.¹¹⁰ Kentucky Power stated that erosion and

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

¹⁰⁸ Brent Allen's Request for Intervention; Supplement to Request for Intervention (filed Nov. 19, 2021); Second Supplement to Request for Intervention (filed Dec. 14, 2021).

¹⁰⁹ *Id.*

¹¹⁰ Application at 15.

sedimentation control measures are available and will be implemented to avoid impacts to the ponds and other surface waters.¹¹¹ Kentucky Power argued that it is required to obtain a construction stormwater permit from the Kentucky Department of Environmental Protection, Division of Water, which will require that a Kentucky Pollutant Discharge Elimination System (KPDES) Stormwater Pollution Prevention Plan (SWPPP) be developed for the project prior to approval.¹¹² In addition, Kentucky Power stated that it can agree to designate the proposed transmission lines that cross Mr. Allen's property as "no spray" zones and refrain from spraying herbicides on his property.¹¹³

Electromagnetic Force Radiation

Mr. Allen stated that he has concerns that radiation from electromagnetic fields (EMF) would have a negative effect on his and his family's health.

Kentucky Power argued that EMF occur in nature and wherever electricity flows, including household wiring and appliances, and because EMF occurs in nature and because our society relies on electricity, people are exposed to EMF much of the time.¹¹⁴ Kentucky Power asserted that studies have found no evidence of biological changes that could lead to adverse health effects.¹¹⁵ Further, Kentucky Power maintained that it routinely monitors public policy and scientific and technical developments related to EMF as part of its effort to provide a safe environment for employees and the public.¹¹⁶

¹¹¹ Reese Rebuttal at 10.

¹¹² *Id.*

¹¹³ West Rebuttal at 8–9.

¹¹⁴ West Rebuttal at 7.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

LEGAL STANDARD

The Commission's standard of review regarding a CPCN is well settled. Under KRS 278.020(1), no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission.

To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.¹¹⁷

"Need" requires:

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.¹¹⁸

"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties."¹¹⁹ To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.¹²⁰

¹¹⁷ *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 252 S.W.2d 885 (KY. 1952).

¹¹⁸ *Id.* at 890.

¹¹⁹ *Id.*

¹²⁰ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication.¹²¹ All relevant factors must be balanced.¹²²

DISCUSSION AND FINDINGS

KRS 278.020(2) states that the construction of any electric transmission line of more than 138 kV or more than 5,280 feet in length shall not be considered an ordinary extension of an existing system in the usual course of business and shall require a CPCN. The Garrett Area transmission line is approximately 16 miles long, and as a result, requires a CPCN. Kentucky Power believes that all the other listed components of the project also require a CPCN.

Need

This project will eliminate the need to rebuild the approximately 25 miles of Beaver Creek- McKinney No. 1 Circuit.¹²³ The Beaver Creek-McKinney No. 1 46 kV Circuit, which is to be retired, is obsolete.¹²⁴ As of the filing of the application, there were 142 open conditions along the line,¹²⁵ including damaged poles, damaged cross-arms, damaged conductor and shield wires, and damaged guy anchor, knee, and v-braces.¹²⁶ Temporary

¹²¹ See *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965). (See also Case No. 2005-00089, *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky* (Ky. PSC Aug. 19, 2005).

¹²² Case No. 2005-00089 *East Kentucky Power Cooperative, Inc.* (Ky. PSC Aug. 19, 2005), final Order at 6.

¹²³ Koehler Direct at 13.

¹²⁴ Application at 17.

¹²⁵ Koehler Direct at 10. This number was updated to 209 open conditions by an updated report. Response to Staff's First Request, Item 8a.

¹²⁶ Application at 17.

measures are inadequate to repair or improve the existing structure.¹²⁷ The estimated cost to rebuild the Beaver Creek-McKinney No. 1 46 kV Circuit is \$105 million,¹²⁸ which is approximately 20 percent more expensive than the cost of the proposed project.¹²⁹ The alternative project would cost Kentucky Power more to construct, but would not increase reliability, and would increase operation and maintenance expenses.¹³⁰

The project connects two previously approved projects: the Soft Shell 138 kV Transmission Line and the Hays Branch-Morgan Fork 138 kV Transmission line.¹³¹ For the above stated reasons, the Commission finds that Kentucky Power has shown that it has a need for the proposed project from the standpoint of its service requirements.¹³² This project is necessary for the continued provision of adequate, efficient and reasonable retail electric service to Kentucky Power's customers. Without this project, it is reasonably expected that outages and open conditions will continue, to significant expense and impact to Kentucky Power's retail customers.

Lack of Wasteful Duplication

¹²⁷ *Id.*

¹²⁸ Koehler Direct at 19.

¹²⁹ *Id.*

¹³⁰ *Id.* at 20–21

¹³¹ Case No. 2007-00155 *The Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 138 KV Transmission Line in Floyd County, Kentucky* (Ky. PSC Aug. 3, 2007), Order and Case No. 2007-00430 *Application of Kentucky Power Company for a Certificate of Public Convenience and Necessity to Construct a 138 KV Transmission Line and Associated Facilities in Knott County, Kentucky (Soft Shell)* (Ky. PSC Feb. 29, 2008).

¹³² *Kentucky Utilities Company v. Public Service Commission*, 252 S.W.2d 885 (Ky. 1952). The “need” experienced by a utility must be in relation to its service requirements. Kentucky Power is required to provide adequate, efficient and reasonable retail electric service pursuant to KRS 278.030(2) and KRS 278.018(3).

The proposed construction will not compete with any other public utilities, corporations, or persons.¹³³ Kentucky Power has demonstrated that it needs the proposed projects. Kentucky Power has also taken steps to ensure that the project is not excessive in investment or scope. The project will address deficiencies in the system as well as improve reliability and capacity.¹³⁴

Here, the proposed project does not result in wasteful duplication, and does not compete with the facilities of other existing public utilities. The total estimated construction costs for the combined project \$87.2 million which is 4.35 percent¹³⁵ of Kentucky Power’s approximately \$2.006 billion¹³⁶ net utility plant as of December 31, 2020.

Kentucky Power states that the project does not involve sufficient capital outlay to materially affect its existing financial condition.¹³⁷ Additionally, the project is not proposed to be built in a manner that significantly exceeds current or expected usage or demand.

For these reasons, the Commission finds that the proposed project does not result in wasteful duplication. Because Kentucky Power has shown it has a need for the

¹³³ Application at 19.

¹³⁴ Application at 16–17.

¹³⁵

Proposed Project Cost	\$ 87,200,000
Net Utility Plant In Service 12/31/20	<u>2,006,285,317</u>
Percent of Net Utility Plant In Service	<u><u>4.35%</u></u>

¹³⁶ *Annual Report of Kentucky Power Company to the Public Service Commission for the Calendar Year Ended December 31, 2020* at 15.

¹³⁷ Application at 11.

proposed facilities and provided evidence construction of the proposed facilities will not result in wasteful duplication, the Commission finds that the Kentucky Power shall be granted a CPCN for the project, with the conditions stated below.

Intervenor's Concerns

The Commission has found that a CPCN shall be granted for this project. However, the Commission exhorts Kentucky Power to make reasonable accommodation for Mr. Allen's concerns as expressed in his filings in this proceeding and as articulated in the formal conference.

Specifically, the Commission finds that Kentucky Power:

1. Shall not clear cut any trees from Mr. Allen's property that are more than 80 feet below the transmission line;
2. Kentucky Power shall take all commercially reasonable measures to prevent erosion and sedimentation damage in connection with this project;
3. Kentucky Power shall consider Mr. Allen's property a no spray zone in regards to the application of herbicide and;
4. Kentucky Power shall not move the centerline of the Garrett Area 138 kV Transmission Line more than 100 feet in any direction from the location as shown on the maps filed in this proceeding without first seeking Commission approval.

The maps presented at the formal conference indicate that Mr. Allen's residence is 769.5 feet from the proposed transmission line, and 1,412.7 feet from the closest proposed transmission structure.¹³⁸ The cabana on Mr. Allen's property is 1,075.4 feet from the closest proposed electric transmission structure and the centerline of the

¹³⁸ Response to Post-Conference Request, Item 7, Attachment 2 at 5.

proposed transmission line.¹³⁹ The garage apartment on Mr. Allen's property is 668.3 feet from the centerline of the proposed transmission line.¹⁴⁰ In contrast Mr. Allen's residence is only 494.1 feet from the centerline of the transmission line using the route proposed by Mr. Allen.¹⁴¹ The garage apartment is 730.6 feet from the centerline, and the cabana is 727.6 feet from the centerline and the closest structure.¹⁴² Thus the location proposed by Kentucky Power is further away from the existing residences and recreational facility on Mr. Allen's property than the route he proposes. Given that Mr. Allen's proposed route is closer to the existing residences and recreational facility on his property than the route proposed by Kentucky Power, the Commission finds there is no evidence Kentucky Power's proposed route poses a more significant encumbrance of Mr. Allen's property than the route proposed by Mr. Allen.

Kentucky Power stated that its goals in choosing a proposed route transmission line were to, (1) reasonably avoid or minimize adverse impacts of residential areas and the natural and cultural environment; (2) minimize special design requirements and unreasonable costs; and (3) permit the line to be constructed and operated in a timely, safe, and reliable manner.¹⁴³ Kentucky Power argued that building the transmission facilities on the tops of ridges reduces the likelihood of out of right-of-way trees causing outages.¹⁴⁴ Kentucky Power stated that the distance from the conductor to the ground

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.* at 11.

¹⁴² *Id.*

¹⁴³ Reese Direct at 11–12.

¹⁴⁴ *Id.*

under maximum sag conditions is 309.8 feet in the area of Mr. Allen's property referred to in the formal conference as "the bottoms."¹⁴⁵ The conditions placed on Kentucky Power's exercise of the CPCN address Mr. Allen's concern over clear cutting and destroying the bottoms.

The Commission notes that Kentucky Power would have no need to request authority to move the centerline and right-of-way freely within a 1,000 foot filing corridor, if it had been more thorough in investigating the construction constraints found on its proposed route prior to seeking a CPCN. Commission regulations 807 KAR 5:001, Section 15 (2)(c) and 2(d)(1) require a utility seeking a CPCN to file a description of the proposed route as well as maps of the proposed route along with the CPCN application. The intent of this regulation is to provide the Commission with knowledge about where facilities will ultimately be built, not just to provide the Commission with a 1,000 foot zone of possible locations for proposed facilities. The Commission notes that too frequently Kentucky Power and similarly situated utilities have not determined the exact location of proposed transmission lines with reasonable certainty before applying for a CPCN. Such requests to move freely within a wide filing corridor do not permit the Commission to exercise adequate oversight of the location of electric transmission lines.

IT IS THEREFORE ORDERED that:

1. Kentucky Power is granted a CPCN to construct and operate the Garrett Area Improvements 138 kV Transmission Project as described in its application, with the conditions expressed in this Order.

¹⁴⁵ *Id.* at 8.

2. Kentucky Power shall file a survey of the final location of the transmission facilities after any modifications are finalized as authorized by this Order and before construction begins.

3. Kentucky Power shall notify the Commission upon knowledge of any material changes to the project, including but not limited to, increase in cost, any significant delays in construction, or any changes in the route of the transmission line not expressly authorized by his Order.

4. Kentucky Power shall file "as built" drawings and maps within 60 days of the completion of the construction authorized by this Order.

5. Kentucky Power shall furnish documentation of the total costs of this project including the cost of construction and all other capitalized costs, including, but not limited to, engineering, legal, and administrative expenses, within 60 days of the date construction is substantially completed. Construction costs shall be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for electric utilities prescribed by the Commission.

6. Kentucky Power shall file with the Commission any permits acquired in connection with this project within 30 days of issuance of the permit.

7. Kentucky Power shall apply for a CPCN for a modified route if another agency requires an alteration of the line that does not meet all of the conditions listed above.

8. Kentucky Power's request for the authority to move the centerline and the right-of-way within the 1,000 foot filing corridor, and to expand the right-of-way as described in the application, is denied. Kentucky Power shall not move the centerline

more than 100 feet in any direction from the location as shown on the maps filed in this proceeding without first seeking Commission approval.

9. Kentucky Power shall not clear cut any trees from Mr. Allen's property that are more than 80 feet below the transmission line.

10. Kentucky Power shall take all commercially reasonable measures to prevent erosion and sedimentation damage in connection with this project.

11. Kentucky Power shall consider Mr. Allen's property a no spray zone in regards to the application of herbicide.

12. Any documents filed in the future pursuant to ordering paragraphs 2, 3, 4, 5, or 6 shall reference this case number and shall be retained in the post-case correspondence file.

13. This case is closed and removed from the Commission's docket.

By the Commission

ENTERED
MAR 08 2022 rcs
KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:


Executive Director

Case No. 2021-00346

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