**COMMONWEALTH OF KENTUCKY**
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

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| The Electronic Application Of Kentucky Power Company For A Certificate Of Public Convenience And Necessity To Construct 46kV Transmission Line In Floyd and Johnson Counties, Kentucky ("Prestonsburg – Thelma Transmission Line Rebuild Project") | ) | Case No. 2025-00346 |

# DIRECT TESTIMONY OF

# ANASTACIA SANTOS

# ON BEHALF OF KENTUCKY POWER COMPANY

**DIRECT TESTIMONY OF**
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## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

A. My name is Anastacia Santos, and I am an Environmental Project Manager in the Environmental Division at POWER Engineers, Inc. ("POWER"), a wholly owned subsidiary of WSP USA, Inc., which is a consulting and engineering firm. My business address is 7600 North Capital of Texas Highway, Building B, Suite 320, Austin, Texas 78731.

## II. BACKGROUND

**Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.**

A. I have a Bachelor of Science degree in Renewable Natural Resources from Texas A&M University, and a Bachelor of Arts degree in Mathematics from the University of Texas at Austin. I have been employed with POWER since 2012. I have managed multidisciplinary teams to license energy projects, including environmental and cultural field studies, siting and routing/alternatives evaluations, public scoping meetings/hearings, environmental permitting, and mitigation planning. These projects have included transmission lines, substation facilities, pipelines, natural gas storage facilities, and liquefied natural gas import terminals.

**Q. PLEASE DETAIL FOR THE COMMISSION POWER'S EXPERIENCE IN ANALYZING ALTERNATIVE ROUTING FOR ELECTRIC TRANSMISSION LINES.**

A. POWER is an engineering and environmental consulting firm with about 4,000 employees across North America specializing in integrated solutions for clients in the power delivery, power generation, food and beverage, government, renewables and storage, campus energy, and oil and gas industries. POWER was founded in 1976 and has successfully sited and/or permitted hundreds of transmission line projects covering thousands of miles of high-voltage transmission lines and associated facilities.

**Q. HAVE YOU PREVIOUSLY BEEN INVOLVED IN ELECTRIC TRANSMISSION LINE SITING STUDIES?**

A. Yes. I have served as project director and/or project manager for over 60 routing and environmental impact analyses for electric transmission line projects. The projects I have managed range in size from 69kV to 765 kV and have been as short as 1.0 mile to over 300 miles in length.

**Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY TO THIS COMMISSION ON BEHALF OF KENTUCKY POWER?**

A. No, however, I have submitted testimony on similar issues before the State Corporation Commission in Virginia (SCC Case No. PUR-2023-00024), the Public Utility Commission in Texas (Docket Nos. 55001, 53441, 52485, 51912, 50669, 47973, 47585, 46726, 46042, 45397, 45308, 44726, and 38877), the Public Utility Commission in Mississippi (Dockets Nos. 2023-UA-088, 2021-UA-176, 2021-UA-026, 2019-UA-176, 2019-UA-133, 2019-

UA-071, 2019-UA-069, 2015-UA-193, 2015-UA-166, and 2015-UA-10 098), and the Public Regulation Commission in New Mexico (Docket No. 17-00143-UT).

**Q. WERE THE EXHIBITS THAT YOU ARE SPONSORING PREPARED BY YOU OR UNDER YOUR SUPERVISION AND DIRECTION?**

A. Yes.

## III. PURPOSE OF TESTIMONY

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. I am testifying in support of Kentucky Power Company's ("Kentucky Power" or the "Company") Application for a certificate of public convenience and necessity ("CPCN") to construct the proposed Prestonsburg–Thelma Transmission Line Rebuild Project (the "Project") in Floyd and Johnson counties, Kentucky (the "Application"). In my testimony, I:

- Describe the methodology employed by the Company in conducting the *Siting Study for Prestonsburg–Thelma Transmission Line Rebuild Project* (the "Siting Study" attached as **EXHIBIT 7**) for the Project that was used in identifying and evaluating the alternative transmission line routes.
- Describe the results and conclusions of the Siting Study, as well as the basis for the recommendation of the Proposed Route.
- Sponsor the Siting Study.

## IV. THE SITING STUDY

**Q. PLEASE BRIEFLY DESCRIBE THE PROJECT AS IT RELATES TO THE SITING EFFORTS.**

**A.** The Project siting efforts generally consist of rebuilding approximately 13 miles of 46kV transmission line to 69kV standards between the Company's existing Prestonsburg and Thelma substations in Floyd and Johnson counties, Kentucky.

**Q. PLEASE DESCRIBE POWER'S ROLE RELATED TO THE PROPOSED PROJECT.**

A. POWER was retained by Kentucky Power to develop and evaluate transmission line routes for the Project. As POWER's Environmental Project Manager, I oversaw and directed the POWER team and worked closely with the Project's Siting Team. My primary duties involved planning, organizing, coordinating, and controlling activities related to: (a) evaluating and selecting the proposed transmission line route; (b) collecting data and stakeholder input; (c) developing and evaluating study segments and alternatives for the Project; (d) developing routing, technical, and evaluation criteria with which to develop, compare, and analyze alternatives; (e) selecting a Proposed Route for the transmission line that reasonably minimizes adverse impacts on the natural and human environments of the Project area, and are consistent with Project routing and technical criteria; and (f) completing the Project's siting study.

**Q. WHO WAS ON THE SITING TEAM?**

A. The Siting Team for the Project consists of a multi-disciplinary team, including employees from Kentucky Power, POWER, and other consultants retained by or on behalf of Kentucky Power, who supported the route development and public involvement process. POWER was the siting and environmental lead. Members of the Siting Team provided a wide range of expertise and represented transmission line, substation, and distribution engineering; siting; right-of-way ("ROW"); public outreach, environmental; outage planning; and construction management.

**Q. PLEASE DESCRIBE THE PURPOSE OF THE SITING STUDY.**

A. The primary purpose of the Siting Study is to identify routes for the proposed transmission line that will enable Kentucky Power to acquire the required ROW, engineer, construct, operate, and maintain the line, while minimizing overall environmental and land use impacts to the extent practical. The Siting Study discusses the definition of a study area which encompasses the substation endpoints, reviews the existing ROW's condition, considers the environmental and land use constraints and opportunity features identified within the study area, documents the siting methodology and guidelines, documents public involvement, provides an evaluation of alternative routes, and aids in selection of a proposed route. The Siting Study is included in this application as **EXHIBIT 7**.

**Q. WHY IS THE LINE NOT BEING REBUILT WITHIN THE EXISTING ROW?**

A. The Company assessed the suitability of using the existing Prestonsburg–Thelma 46kV Transmission Line ROW and determined that an extended outage to rebuild the existing line within or near the existing ROW is impractical. Company geotechnical and construction teams also determined that the existing line is located on steep side slopes with slip-prone areas that would cause constructability issues. Furthermore, due to the steep terrain, additional transmission line structures and access roads would be necessary with associated additional environmental impacts. Additionally, Company engineers determined that current National Electric Safety Code ("NESC") standards would require larger and taller steel structures in tandem with AEP clearance requirements. Construction of the proposed steel transmission line structures poses additional construction risks on steep slopes. Lastly, the existing ROW contains existing encroachments including 29 habitable structures and 21 non-habitable structures such as sheds or barns. Congested

development has built up along and in the existing ROW along Cliff Road, KY-302, in the Van Lear community, KY-1107, and Euclid Avenue east of Paintsville which prohibits the Project from being rebuilt within the existing ROW. The Company also indicated that, due to outage constraints, it was preferable to build in new ROW.

**Q. HOW WAS THE PROPOSED ROUTE SELECTED?**

A. The Siting Team developed and evaluated study segments and alternative routes as part of the Siting Study to select the Proposed Route. The methodology employed by the Siting Team is described in detail in the Siting Study and Siting Study Addendums (**EXHIBIT 7**).

**Q. ARE YOU FAMILIAR WITH THE ELECTRIC POWER RESEARCH INSTITUTE/GEORGIA TRANSMISSION CORPORATION'S ("EPRI") "OVERHEAD ELECTRIC TRANSMISSION LINE SITING METHODOLOGY"?**

A. Yes.

**Q. ARE YOU FAMILIAR WITH THE RELATED "KENTUCKY TRANSMISSION LINE SITING METHODOLOGY" ("KENTUCKY EPRI METHODOLOGY")?**

A. Yes.

**Q. PLEASE DESCRIBE THE KENTUCKY EPRI METHODOLOGY.**

A. The Kentucky EPRI methodology develops and ranks alternative routes by assigning differing weights to different landscape resources or variables.[1] A Study Area comprised of multiple different land uses/land covers can yield sufficient differentiation in the values assigned to the alternatives to inform decision making; the larger the Study Area, the

[1] The Kentucky EPRI Methodology considers a number of variables related to the Project area landscape. These include parameters for land use, land cover, proposed development, presence and density of buildings, public lands, water and wetland resources, floodplains, cultural resources, wildlife habitat, infrastructure, and slope.

greater the possibility to consider a larger number of alternative routes based on differences in the land use or land cover across a large area.

**Q. WAS THE KENTUCKY EPRI METHODOLOGY USED HERE?**

A. No. Use of the Kentucky EPRI methodology was not feasible or probative due to the homogenous landscape between the Prestonsburg and Thelma Substations. The Study Area consists of steep, mountainous, and landslide-prone terrain that constrains where a transmission line could feasibly be constructed while minimizing engineering and constructability risks. Due to the uniformity of terrain type, the EPRI model was not an accurate assessment of route selection options.

**Q. WHAT METHODOLOGY WAS USED?**

A. The Siting Team used a traditional and accepted multi-step methodology employed by environmental consultants to identify optimal routes for new transmission lines, gas pipelines, and other linear utility corridors. The Siting Team identifies project endpoints, constraints, and opportunities within the study area, develops study segments based on general siting and technical criteria, gathers public and stakeholder input on the study segments, assembles the study segments into logical alternative routes, evaluates the alternative routes, and selects a proposed route that minimizes impacts to land use, natural and human environments, engineering, and constructability.

**Q. PLEASE OUTLINE THE GENERAL STEPS THE SITING METHODOLOGY IMPLEMENTED.**

A. POWER's route development methodology consisted of the following steps:

(1) Identify route endpoints;

(2) Establish routing and technical criteria (*e.g.*, maximize using or paralleling

existing ROW and avoid heavy angles);

(3) Study Area definition;

(4) Data collection, stakeholder input, field reviews, and constraint and opportunity mapping;

(5) Development of Routing Concepts, which adhere to a series of general siting and technical guidelines;

(6) Identification and development of a Study Segment Network, which includes refinements and modifications based on public and stakeholder input;

(7) Assembly of alternative routes;

(8) Evaluation and comparison of the alternative routes;

(9) Identification of the Proposed Route; and

(10) Additional refinements, where practical, after announcing the Proposed Route and contacting affected landowners.

**Q. PLEASE DESCRIBE IN MORE DETAIL THE SITING METHODOLOGY UTILIZED BY THE SITING TEAM.**

A. The first step involved identifying route endpoints which were Kentucky Power's existing Prestonsburg, Kenwood, and Thelma Substations. After defining the endpoints, the Siting Team defined a set of general and technical guidelines to help develop study segments and routes, meet AEP design standards, comply with North American Electric Reliability Corporation (NERC) reliability standards and NESC, and apply industry best practices for construction. General siting guidelines for the Project include, but are not limited to:

- Avoiding crossing or minimizing conflict with conservation areas and protected lands;

- Avoiding or minimizing conflict with existing land uses and future development;
- Considering paralleling property boundaries when feasible;
- Minimizing environmental impact and construction/maintenance costs by selecting shorter, direct routes; and
- Minimizing environmental impacts by considering routes that minimize overall length of access roads, length on steep slopes, and number of waterbody crossings.

Technical siting guidelines for the Project include, but are not limited to:

- Minimizing crossings of higher voltage transmission lines and the existing transmission line;
- Maintaining a minimum of 100 feet of centerline-to-centerline separation when paralleling 138kV or lower voltage transmission lines;
- Minimizing angles greater than 65 degrees; and
- Minimizing structures on steep slopes, particularly if guy wires are required for construction.

**Q. WHAT WAS THE NEXT STEP IN THE SITING METHODOLOGY EMPLOYED BY THE SITING TEAM?**

**A.** Once the routing and technical criteria are established, the Siting Team define the Project Study Area by the geographic area encompassing the Project endpoints. The Study Area was intended to include all practical conceptual routes between these endpoints. Between the existing Prestonsburg and Thelma Substations, the Study Area is generally bounded by

the existing transmission line as well as Kentucky State Highway 302 to the east and Kentucky State Route 23 to the west.

**Q. PLEASE DESCRIBE THE TOPOGRAPHY AND LAND USE FOUND IN THE STUDY AREA.**

A. The Study Area is characterized by rolling hills and mountainous terrain that creates potential engineering challenges associated with constructing on steep terrain with limited access. Land uses within the Study Area include a mix of clustered residential development in the cities of Prestonsburg and Paintsville, residential and commercial development concentrated along the Levisa Fork which bisects the Study Area, local parks and recreational areas, the Jenny Wiley State Resort Park, and undeveloped forested mountainous terrain.

**Q. BRIEFLY DESCRIBE YOUR DATA COLLECTION PROCESS AND CONSTRAINTS MAPPING.**

A. A range of geographic information was acquired within the Study Area, as described in the Siting Study and Siting Study Addendums (**EXHIBIT 7**). Data was compiled from:

- Available published sources, aerial photographs, United States Geological Survey maps, and GIS data repositories, including data from local jurisdictions, the Kentucky Division of Geographic Information and Kentucky Office of State Archaeology;
- Coordination with federal, state, and local regulatory agencies;
- Environmental Justice data from EJSCREEN (2023) tool, developed by the United States Environmental Protection Agency, and referenced data from the United States Census Bureau-American Community Survey ;

- Field reviews from public roads and other public access points; some private access for field reviews were obtained at key locations and where landowners invited the Siting Team;
- Light Detection and Ranging ("LiDAR") imagery flown in 2023 to verify locations of buildings and dwellings; and
- Input from the public through public open house meetings, the Project website, and meetings with local landowners and stakeholders.

Constraint data for the Project was collected and compiled from the above resources and utilized to aid siting decisions throughout the route development process. See Section 2.3 and Attachments B, C, and E (Data Collection Summary, GIS Data Sources, and Route Development Maps) within the Siting Study and Siting Study Addendums (**EXHIBIT 7**) for additional information.

**Q. PLEASE DESCRIBE THE ROUTING CONCEPTS IDENTIFIED BY THE SITING TEAM.**

A. After data collection and review of the constraints and opportunities data, the Siting Team developed routing concepts between the identified Project endpoints. Routing concepts generally utilize or parallel existing corridors where feasible, travel on the east and west sides of the Paintsville-Prestonsburg-Combs Field Airport, and travel on the east and west sides of the existing centerline to avoid development and cross more favorable terrain.

**Q. PLEASE DESCRIBE THE STUDY SEGMENTS DEVELOPED FOR THE PROJECT.**

A. The Siting Team developed a series of study segments based on the routing concepts and defined general and technical guidelines that were revised, removed, or added as the siting

process evolved. Study segments developed between the Prestonsburg and Kenwood substations generally avoid new impacts to clustered residential development, parallel existing non-AEP transmission line, utilize spanning from ridgetop to ridgetop, avoid landslide-prone areas, avoid the Jenny Wiley State Resort Park, avoid the Highlands ARH Regional Medical Center, and avoid the Paintsville-Prestonsburg-Combs Field Airport.

Study segments developed between the Kenwood and Thelma substations generally avoid new impacts to clustered residential development, parallel existing non-AEP transmission line, avoid the Paintsville Golf Course, utilize portions of existing Prestonsburg–Thelma 69kV Transmission Line ROW, avoid landslide-prone areas, and utilize spanning from ridgetop to ridgetop. A total of 17 study segments were developed between the Prestonsburg and Thelma Substations that were presented to the public through virtual and in-person open houses.

**Q. WAS THE ENTIRE STUDY AREA AVAILABLE IN CREATING THE STUDY SEGMENTS?**

A. No. Portions of the Study Area were constrained by residential and commercial development, various hydrography features including the Levisa Fork, mountainous and steep terrain with landslide-prone areas. Additionally, study segments were not created within the existing ROW due to outage risks, ROW encroachments, and steep, slide-prone terrain.

**Q. WERE EXTERNAL STAKEHOLDERS CONSULTED DURING THE SITING PROCESS?**

A. Yes. As part of the study segment development, Kentucky Power and the Siting Team mailed outreach letters to federal, state and local agencies. In addition, the Siting Team met with Floyd and Johnson counties in September 2022 to introduce the Project.

**Q. WAS ANY ADDITIONAL PUBLIC OUTREACH COMPLETED?**

A. Yes. The Project was introduced to the public with a news release and mailings inviting landowners to an in-person public open house to learn about the Project and provide their feedback. Landowners within a 1,000-foot corridor (500 feet on either side of a study segment) of the Project were notified of the December 5, 2022, in-person open house. In addition to the in-person open house, a virtual open house was created on the Project website which provided content related to engineering and design of structures, Project need, ROW, and construction. Both the in-person and virtual open houses allowed landowners and the public to submit comments to the Siting Team and identify specific properties through an address search tool.

At the in-person public open house, representatives of Kentucky Power and POWER provided information on the Project and were available to answer questions and collect comments. The public was also able to comment electronically and obtain additional information through the Project website after the public open house. Aerial maps were provided during the in-person open house and available on the Project website. A total of 40 landowner comments were received through the Project website, by email, telephone, or comment card. Comments were entered into the Project database and generally related to existing easement rights and planned land use development.

**Q. WERE STUDY SEGMENTS MODIFIED OR DISMISSED AS A RESULT OF INITIAL STAKEHOLDER AND LANDOWNER INPUT FOLLOWING THE DECEMBER 2022 OPEN HOUSE?**

A. Yes. Study Segments 3, 4, and 15 were dismissed based on landowner comments that documented existing encroachments, planned property development intersecting the Project, and concerns related to new ROW easements. Additionally, Study Segments 3 and 15 appeared to present several terrain and structure placement challenges. Due to the dismissal of Study Segments 3, 4, and 15, there were no remaining alternatives for Study Segments 1, 2, and 5. Therefore, these remaining study segments are included as part of the Proposed Route.

**Q. PLEASE DESCRIBE THE RESULTING ALTERNATIVE ROUTES.**

A. Two focus areas were identified for the remaining study segments. Focus Area 1 encompasses the area between Study Segment 3 and the existing Kenwood Substation and includes Comparison A (Study Segments 7 and 8) and Comparison B (Study Segments 6 and 9). Focus Area 2 encompasses the area between Study Segment 11 and the existing Thelma Substation and includes Comparison A (Study Segments 13 and 16) and Comparison B (Study Segments 12 and 14). These Alternative Routes are described in detail in Section 5.0 of the Siting Study (**EXHIBIT 7**), and depicted in **EXHIBIT 15**, the Alternative Route Map.

## V. RESULTS OF THE SITING STUDY

**Q. WHICH ROUTE WAS SELECTED AS THE INITIAL ROUTE?**

A. Comparison B was selected as the Initial Route within both Focus Area 1 (Study Segments 6 and 9) and Focus Area 2 (Study Segments 12 and 14). The Initial Route consists of Study

Segments 1, 2, 5, 6, 9, 10, 11, 12, 14, and 17. A detailed map showing the Initial Route is shown in Map 5 in Attachment E to the Siting Study (**EXHIBIT 7**).

**Q. WHY WAS COMPARISON B SELECTED IN BOTH FOCUS AREAS?**

A. Within Focus Area 1, Comparison B was selected due to lower engineering risks because it crosses fewer steep slopes and terrain than Comparison A. Additionally, Comparison B requires less tree clearing and crosses further from the Paintsville-Prestonsburg-Combs Field Airport.

Within Focus Area 2, Comparison B was selected due to less river crossings, less residences within 100 feet of centerline, reduced risk of landslides, fewer steep slopes crossed by the ROW, and lower visual impact to the community compared to Comparison B. See Section 5.0 within the Siting Study for a detailed comparison of the two focus areas (**EXHIBIT 7**).

**Q. WHAT IS THE BASIS FOR THE SITING TEAM'S SELECTION OF THE INITIAL ROUTE?**

A. Sections 5.0 and 6.0 of the Siting Study (**EXHIBIT 7**) provide the qualitative and quantitative analysis for the alternative routes and the Initial Route based on the potential impacts to the natural and human environments, land use and local communities, constructability, engineering considerations, cultural resources, and landowner feedback received during the open houses. The Siting Team recommended the Initial Route because it minimizes the number of slide-prone areas crossed, avoids impacts to the Paintsville-Prestonsburg-Combs Field Airport, and eliminates impacts to the neighborhood north of Mayo Trail Substation that is currently impacted by the existing transmission line. Additionally, the Initial Route utilizes existing opportunities when feasible such as

paralleling U.S. Highway 460 to the west and paralleling the existing Eastern Kentucky Power Cooperative transmission line to the east of the Study Area.

## VI. PROPOSED ROUTE

**Q. HAS THE INITIAL ROUTE BEEN MODIFIED SINCE IT WAS PUBLICLY ANNOUNCED IN MAY 2023?**

A. Yes. Kentucky Power rescheduled the Project after it was announced to the public in May 2023. While the Project was being rescheduled, the Outreach team received additional comments from a landowner concerning the Initial Route. Additional siting and public involvement activities were deemed necessary when the Project resumed in June 2024 due to the one-year rescheduling of the Project and new landowner comments. The Initial Route was modified to include a new study segment ultimately forming the Western Alternative Route (Section 8.0 of the Siting Study).

In April 2025, environmental surveys were completed for the Western Alternative Route which revealed new cultural resources located within the proposed ROW (Section 9.0 of the Siting Study). The Siting Team identified additional alternative routes (Option 1, 2, 3, and 4) which modified a portion of the Western Alternative Route north of Kenwood Substation to avoid the newly discovered cultural resources. Ultimately, Option 4 was selected as the Proposed Route.

**Q. PLEASE DESCRIBE ANY MODIFICATIONS MADE TO THE INITIAL ROUTE AND THE WESTERN ALTERNATIVE ROUTE AND THE RATIONALE BEHIND THEM.**

A. The Western Alternative Route branches off of Study Segment 1 from the Initial Route, then travels north and northeast, crossing undeveloped forested land, before connecting to

Study Segment 5 and the remainder of the previously selected Initial Route. The Western Alternative Route was ultimately selected over the Initial Route because it is farther away from developable land in Prestonsburg, clustered residential development, and relocates onto more favorable terrain that is less prone to landslides.

The Siting Team developed four new alternative routes (Options 1, 2, 3 and 4) to avoid the cultural resources identified during the April 2025 environmental surveys along the Western Alternative Route (See Section 9.0 and Attachment I, Map 1 to the Siting Study, **EXHIBIT 7**). Option 4 follows the alignment of the Western Alternative Route between Prestonsburg and Kenwood Substations then exits Kenwood Substation to the west before traveling north to cross undeveloped forested land, cross KY-302, and continue northeast to meet with the remainder of the Western Alternative Route (See Attachment I, Map 2 to the Siting Study, **EXHIBIT 7**). Option 4 was ultimately selected to avoid the newly identified cultural resources. Option 4 would utilize existing roads and is located further away from residences than the other alternative routes.

**Q. PLEASE DESCRIBE THE ADDITIONAL SITING AND OUTREACH ACTIVITIES CONDUCTED.**

A. Additional siting and outreach activities conducted include: (1) collecting updated constraints and county parcel data; (2) reviewing the Initial Route and Western Alternative Route; (3) considering additional landowner input; (4) conducting additional field reconnaissance; (5) developing additional alternative routes; (6) conducting two additional virtual open houses; (7) evaluating alternative routes; (8) conducting environmental surveys; and (9) completing addendums to the siting report.

**Q. PLEASE DESCRIBE THE ADDITIONAL OUTREACH ACTIVITIES IN MORE DETAIL.**

A. Two additional virtual open houses were held on the Project website (https://aeptransmission.com/kentucky/Thelma/) to notify the public of updates to the Project. The first virtual open house was hosted on September 6, 2024. In advance of the first virtual open house, a mailing packet including a cover letter, updated Project fact sheet, comment card, and pre-paid postage return envelope was sent to 183 landowners within a 1,000-foot corridor (500 feet on either side of centerline) of the Initial Route and Western Alternative Route. A second mailing packet containing the same materials was sent to 199 landowners within a 1,000-foot corridor (500 feet on either side of a route centerline) along Options 1, 2, 3, and 4 to inform them of updates to the Project and the November 17, 2025, virtual open house.

The September 6, 2024, virtual open house website included an updated interactive webmap showing the previously selected Initial Route and new Western Alternative Route, updated detailed aerial maps, an updated schedule, an updated fact sheet, and updated AEP outreach contact. A total of 22 landowner comments were received through the Project's website, by email, telephone, or comment card and entered into the Project's database. The November 17, 2025 virtual open house website included an updated interactive webmap showing the updated Proposed Route to include modifications associated with Option 4 and updated detailed aerial maps. Kentucky Power will continue to work with landowners as comments are received from the November 17, 2025, virtual open house.

**Q. WERE ANY OF THE ROUTES REVISED OR DISMISSED BASED ON LANDOWNER FEEDBACK FROM THE VIRTUAL OPEN HOUSE WEBSITE COMMENTS?**

A. No. Neither the Initial Route nor Western Alternative Route were revised or dismissed based on landowner feedback from the virtual open house website. Landowner comments from the virtual open house website generally related to planned land use development, property history, relation of the routes' location to landowner properties, and updates to property boundaries. Kentucky Power will continue to work with landowners as comments are received from the November 17, 2025, virtual open house.

**Q. WAS ANY ADDITIONAL OUTREACH COMPLETED FOR THE SEPTEMBER 2024 VIRTUAL OPEN HOUSE?**

A. Yes. An additional 200 postcards were hand-delivered by a Company ROW representative to rental communities within the notification corridor whose mailing addresses were not accessible from the county parcel data. The postcards included Project announcement information and encouraged the renters to visit the virtual open house website and submit any comments related to the Project.

**Q. WHICH ALTERNATIVE WAS SELECTED AS THE PROPOSED ROUTE?**

A. The Siting Team selected Option 4 as the Proposed Route after completion of additional environmental surveys which identified additional new cultural resources in the area. A detailed map of the Proposed Route is included as **EXHIBIT 4** and shown in Attachment I, Map 2 in the Siting Study, included in this Application as **EXHIBIT 7**.

**Q. WHAT IS THE BASIS FOR THE SITING TEAM'S SELECTION OF THE PROPOSED ROUTE?**

A. Collectively, the Siting Team determined that the Proposed Route will minimize land use impacts by relocating further away from congested development and residences along Cliff Road, impact fewer landowners, cross more favorable and accessible terrain, avoid landslide-prone areas with unstable geology, and minimize visual impacts to the surrounding community. Within the area north of Kenwood Substation, the Proposed Route minimizes land use impacts by relocating further away from residences, utilizing existing roads, and minimizing the length of line and tree clearing required in the ROW. Section 9.0 of the Siting Study provides a detailed summary of the qualitative and quantitative analysis conducted for the Proposed Route (**EXHIBIT 7**).

**Q. PLEASE DESCRIBE THE PATH OF THE PROPOSED 69kV TRANSMISSION LINE.**

A. The Proposed Route exits the existing Prestonsburg Substation and travels west to cross the existing centerline before turning north to cross KY-1428. The Proposed Route continues north and northeast crossing undeveloped forested terrain before crossing KY-3. The Proposed Route continues northwest then northeast before crossing Fords Gap Road, Ward Avenue, the Levisa Fork, and KY-321 and then continuing north then west to cross Johns Creek Road and the Levisa Fork and KY-321 again to enter the existing Kenwood Substation. The Proposed Route exits Kenwood Substation traveling west crossing undeveloped forested land before turning north to cross the Levisa Fork and KY-321. The Proposed Route continues north to cross undeveloped forested land before turning northeast to cross KY-302, then continues northwest before angling to travel

northeast and cross KY-40. The Proposed Route continues northwest then turns north to parallel the existing East Kentucky Power Cooperative transmission line through undeveloped forested land before turning northwest then north to cross Main Street and enter the existing Thelma Substation.

**Q. WHAT IS THE FILING CORRIDOR THAT THE COMPANY IS REQUESTING?**

A. Kentucky Power is seeking approval to build the transmission line generally within a 200-foot-wide corridor (100 feet on either side of centerline) to allow for design flexibility in determining the final centerline which will be based on ground surveys, environmental studies, additional landowner input, and final engineering. While the Company is requesting a 200-foot-wide corridor, it is not expected that the centerline will shift significantly from what is shown on **EXHIBIT 4** (Proposed Route). The standard 100-foot ROW and 200-foot corridor are further depicted in **EXHIBIT 4** (Proposed Route).

**Q. ARE THERE AREAS THAT MIGHT UTILITIZE MORE THAN THE STANDARD 100-FOOT ROW?**

A. Yes. As shown in **EXHIBIT 4**, some areas will require wider than 100-foot ROW due to conductor sway. See Company Witness Woody's testimony for specific spans that are anticipated to exceed the standard 100-foot ROW.

**Q. HAVE LANDOWNERS THAT MAY BE AFFECTED BY MOVEMENT OF THE CENTERLINE BEEN NOTIFIED OF THE POSSIBILITY THAT THE CENTERLINE AND ASSOCIATED ROW COULD SHIFT UP TO 100 FEET OR MORE FROM CENTERLINE WITHIN THE SELECTED LOCATION?**

A. Yes. Notifications were sent on November 17, 2025, as part of the additional virtual open house activities. Landowners from the previous September 6, 2025 virtual open house

website were notified in addition to 199 landowners within a 1,000-foot notification corridor centered on the Proposed Route.

**Q. WILL THE ROW FOR THESE RETIRED ASSETS BE RETAINED?**

A. Several sections will need to be retained due to other uses for that ROW section, and other portions may be retired if the land cannot be otherwise utilized.

## VII. PERMITTING AND ENVIRONMENTAL STUDIES

**Q. WHAT ENVIRONMENTAL PERMITTING OR STUDIES ARE ANTICIPATED FOR THIS PROJECT?**

A. Kentucky Power anticipates that the following environmental studies, permits, or approvals may be required for the construction of the Project:

A wetland delineation and stream identification study will be conducted for the Project. It is anticipated that any impact to jurisdictional resources will qualify under the United States Army Corps of Engineers (USACE) Nationwide Permit 57 Pre-Construction Notification for the construction of structures, access roads, and right-of-way. In addition, a Section 10 Permit from the USACE will be required for the installation of transmission line over Levisa Fork, a traditionally navigable water, at four separate crossings. Construction activities that take place in, along, or over a wetland or a stream (if the watershed is one square mile or more in size) or within a floodplain will require a Kentucky Division of Water (KDOW) Stream Construction Permit, with requisite coordination with the local floodplain manager, and/or an Individual Section 401 Water Quality Certification.

Because the total earth disturbance will be greater than one acre, a construction stormwater general permit will be required from the Kentucky Energy and Environment Cabinet, Division of Water. As such, a Kentucky Pollutant Discharge Elimination System

(KPDES) Stormwater Pollution Prevention Plan (SWPPP) needs to be developed for the Project.

Kentucky Power will coordinate with the U.S. Fish and Wildlife Service (USFWS) regarding the potential for impacts to sensitive species. Based on an initial review of the USFWS Information for Planning and Consultation system in April 2025, three species of bats, one species of clam, one species of insect, and one species of crustacean potentially occur in the Study Area. The Levisa Fork was identified as critical habitat for the Big Sandy Crayfish (*Cambarus callainus*) and may require additional coordination with USFWS, additional Best Management Practices, and/or aquatic studies. Mist net and portal searches may be conducted for bat species and the results will be coordinated with the USFWS and the Kentucky Department of Fish and Wildlife Resources (KDFWR). Kentucky Power will request guidance from the USFWS regarding avoiding or minimizing impacts to the other listed species.

A Phase I cultural resources survey will be conducted and coordinated with the Kentucky Heritage Council and the Kentucky Office of State Archaeology to comply with Section 106 of the National Historic Preservation Act.

In addition to the environmental permits, engineering-related permits will be filed with the appropriate agencies or companies once the transmission line design is completed. It is anticipated that these may include aerial road crossing permits from the Kentucky Transportation Cabinet (KYTC), Federal Highway Administration, or county engineering offices; and construction entrance permits for state or county roads. The Company will also coordinate with the Federal Aviation Administration and KYTC as necessary regarding aviation-related approvals.

**Q. HAVE ANY OF THE ENVIRONMENTAL PERMITS OR STUDIES BEEN COMPLETED FOR THE PROJECT?**

A. No.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes.

## VERIFICATION

The undersigned, Anastacia Santos, being duly sworn, deposes and says she is a Senior Project Manager for Power Engineers, that she has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is true and correct to the best of her information, knowledge, and belief after reasonable inquiry.

Signed by:
Anastacia Santos
0A861DC73710438...
Anastacia Santos

Commonwealth of Kentucky )
) Case No. 2025-00346
County of Boyd )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Anastacia Santos, on 11/24/2025 | 12:09 PM EST.

Signed by:
Michelle Caldwell
E9B1BC7AC31F421...
Notary Public

MARILYN MICHELLE CALDWELL
ONLINE NOTARY PUBLIC
COMMONWEALTH OF KENTUCKY
Commission #KYNP71841
My Commission Expires 5/5/2027

My Commission Expires 05/05/2027

Notary ID Number KYNP71841