COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company For 1) A Certificate Of Public Convenience And Necessity To Construct A Natural Gas-Fired Combined Cycle Generating Facility In Lawrence County, Kentucky; 2) A Site Compatibility Certificate; 3) A Certificate Of Public Convenience And Necessity To Construct A New Transmission Substation In Boyd County, Kentucky; 4) Approval Of A Short-Term Capacity Purchase Agreement; And 5) For All Other Required Approvals And Relief	)))))))))	Case No. 2026-00324

DIRECT TESTIMONY OF

EMILY S. LARSON

BURNS & MCDONNELL ENGINEERING COMPANY, INC.

ON BEHALF OF KENTUCKY POWER COMPANY

DIRECT TESTIMONY OF
EMILY S. LARSON ON BEHALF OF
KENTUCKY POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

CASE NO. 2026-00324

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EXHIBIT ESL-6	Venator Alternatives Comparison
EXHIBIT ESL-7	Photographs Venator Substation Site

DIRECT TESTIMONY OF
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CASE NO. 2026-00324

I. INTRODUCTION

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

A. My name is Emily S. Larson. I am employed by Burns & McDonnell Engineering Company, Inc. ("Burns & McDonnell") and located at 4480 Cox Road, Suite 300, Richmond, Virginia 23060 as a Project Manager in the Environmental Studies department.

II. BACKGROUND

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I hold a Bachelor's of Science in Environmental Science from Towson University and have completed graduate coursework at George Washington University. I have been associated with Burns & McDonnell since 2025 and prior to my most recent position, I served as the Transmission Line Siting Manager at American Electric Power Service Corporation ("AEPSC"), a wholly owned subsidiary of American Electric Power Company, Inc. ("AEP"). I have nearly 20 years of experience in siting and permitting for electric transmission lines and substations. I oversee the Burns & McDonnell technical staff, which is responsible for the siting and environmental permitting aspects of transmission line and substation projects with a focus in Kentucky, West Virginia, and Virginia.

Q. PLEASE DETAIL BURNS & MCDONNELL'S EXPERIENCE IN ANALYZING ALTERNATIVES FOR ELECTRIC TRANSMISSION LINES AND SUBSTATIONS.

A. Burns & McDonnell specializes in routing, siting, and permitting services for transmission line and substation projects throughout the country and has been completing these types of projects for over 50 years. Burns & McDonnell has completed routing, siting, and permitting services for over 600 transmission line and substation projects, covering thousands of miles of high-voltage transmission lines and associated facilities. During projects, Burns & McDonnell's environmental specialists and transmission line engineers coordinate closely to evaluate alternative routes, prudently weighing relevant aspects of the project based on need, project-specific criteria, agency and public concerns, resource studies, and project technical specifications.

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

A. Yes. I have served as Project Manager or otherwise supervised routing, siting, and permitting for large interstate transmission line and substation selection projects in more than 10 states, over the past 19 years, including Kentucky, Virginia, West Virginia, Kansas, North Carolina, South Carolina, Iowa, Ohio, Oklahoma, Missouri, Illinois, Indiana, and Florida.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY TO THE PUBLIC SERVICE COMMISSION OF KENTUCKY ON BEHALF OF KENTUCKY POWER?

A. Yes. I previously provided testimony on behalf of Kentucky Power Company ("Kentucky Power" or the "Company") in the Company's application for a certificate of public convenience and necessity to construct the Kewanee 138 kilovolt ("kV") transmission line and substation (Case No. 2020-00062) and Hazard–Wooton 161kV transmission line (Case No. 2017-00328). I also provided testimony on behalf of AEP on the Wooton-Stinnett 161kV Transmission Rebuild Project (Case No. 2022-00118).

Q. ARE YOU SPONSORING ANY EXHIBITS?

A. Yes, I am sponsoring the following exhibits:

EXHIBIT	DESCRIPTION
Exhibit ESL-1	Venator 765kV Substation Siting Study
Exhibit ESL-2	Venator Substation Location Map
Exhibit ESL-3	Venator Substation Overlay
Exhibit ESL-4	Muskie-Venator Outreach
Exhibit ESL-5	Muskie-Venator News Release
Exhibit ESL-6	Venator Alternatives Comparison
Exhibit ESL-7	Photographs Venator Substation Site

III. PURPOSE OF TESTIMONY

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

A. I am testifying in support of Kentucky Power's application for a certificate of public convenience and necessity to construct the proposed Venator 765kV Substation Project (the "Venator Substation Project") in Boyd County. In my Direct Testimony, I:

- Describe the methodology employed by the Company in conducting the *Venator 765kV Substation Siting Study* (the "Siting Study" attached as Exhibit ESL-1) for the Venator Substation Project that was used in identifying and evaluating the alternative and proposed substation sites;
- Describe the results and conclusions of the Siting Study, as well as the basis for the recommendation of the proposed substation site; and
- Sponsor the Siting Study.

IV. THE SITING STUDY

Q. PLEASE DESCRIBE THE PURPOSE OF THE SITING STUDY.

A. The primary purpose of the Siting Study is to identify a site for the Venator Substation Project that will enable Kentucky Power to engineer, construct, operate, and maintain the substation, while balancing impacts on the natural and human environments to the extent reasonable and practical. The Siting Study defines the "Study Area," considers the environmental and land use constraints and opportunity features within the Study Area, documents the site identification process and siting goals, evaluates the alternative sites, and supports the selection of a proposed substation site. The Siting Study is included as Exhibit ESL-1.

Q. PLEASE DESCRIBE THE SITING GOALS USED BY THE SITING TEAM.

A. The overall goal of the Siting Study was to identify a suitable substation site that represents a balance between impacts on the natural and human environments while meeting the engineering and operational needs of the Venator Substation Project. As described in Section 2.2 of the Siting Study, to the extent reasonable and practical, the Siting Team sought a site that:

- Considers safety in the construction, operation, and maintenance of the substation;
- Is located within the Study Area and in reasonable proximity to the transmission line source and the customer site;
- Reasonably minimizes adverse impacts on the natural and human environments from construction of the substation and its associated transmission line entrances and exits;
- Meets the Venator Substation Project's site engineering and operational requirements, including space and clearance, access road, grading, geotechnical, transmission and distribution line exit, and existing infrastructure requirements;
- Fairly considers the environmental impacts of the substation and associated line routes on the surrounding community and area;
- Has a willing seller;
- Minimizes special design requirements and unreasonable costs; and
- Can be constructed and operated in a safe, timely, cost-effective, and reliable manner.

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

A. Kentucky Power is proposing to construct the Venator Substation Project to serve a new data center customer, TeraWulf, in the EastPark Industrial Park. The Venator Substation Project will be supplied from AEP's existing Baker-Hanging Rock 765kV Transmission Line by two greenfield 765kV transmission line connections and will serve the customer site by two greenfield 345kV transmission lines. The final location of the proposed transmission lines will be addressed in a separate Siting Study and state filing. Kentucky Power must deliver the initial 100 megawatts ("MW") by October 2028, ramping to 500 MW by April 2029.

For siting purposes, the substation requires a fenced area of approximately 1,600 feet by 1,900 feet, will include equipment approximately 175 feet tall, and requires a site of approximately 70 acres to accommodate construction, grading, and associated stormwater controls. Because the substation must be in reasonable proximity to both the existing 765kV transmission source and the customer site, those two endpoints framed the search for a suitable site.

Q. DID THE SITING STUDY INCLUDE TRANSMISSION LINE ROUTES?

A. No. Typically, there are separate siting studies for a new substation and any associated greenfield transmission lines. Before the siting for the transmission lines can begin, the endpoints for a project must be established. When a new substation is a required endpoint, the Company first conducts a Substation Siting Study, then conducts a Siting Study associated with the final transmission line alignment. An additional Siting Study will be completed for the routes of the greenfield 765kV and 345kV transmission lines that connect

the required endpoints: the Venator Substation Project and the Customer Substation. The transmission line routes siting study is expected to be completed in the first quarter of 2027.

Q. PLEASE DESCRIBE BURNS & MCDONNELL'S ROLE RELATED TO THE VENATOR SUBSTATION PROJECT.

A. Burns & McDonnell was retained by Kentucky Power to identify and evaluate substation sites for the Venator Substation Project. As Burns & McDonnell's Project Manager, I oversaw and directed the Burns & McDonnell team members and worked closely with the Venator Substation Project's "Siting Team," including representatives of Kentucky Power and its consultants. My primary duties involved planning, organizing, and coordinating activities related to (a) collecting data and stakeholder input; (b) developing the technical and evaluation criteria used to identify, compare, and analyze alternative sites; (c) evaluating and selecting the Venator Substation Project site; and (d) completing the Venator Substation Project's Siting Study.

Q. WHO WAS ON THE SITING TEAM?

A. The Siting Team is a multi-disciplinary team that assisted with the identification and evaluation of study sites and in the selection of the Venator Substation Project site. Members of the Siting Team included Kentucky Power and AEPSC representatives and their consultants, who provided a wide range of experience including transmission line and substation engineering, siting, civil design and engineering, environmental impact assessment and permitting, electrical system planning, right-of-way and real estate, public relations, project management, and construction management.

Q. HOW WAS THE PROPOSED SITE SELECTED?

A. The Siting Team followed the stepwise process described in Section 3 of the Siting Study. First, the Siting Team defined a Study Area based on the Venator Substation Project's electrical requirements and the locations of the existing 765kV transmission source and the customer site. Second, environmental and land use constraints and opportunity features within the Study Area were mapped using publicly available data. Third, the Siting Team identified eight potential locations ("Study Sites") capable of accommodating the required substation footprint. Fourth, the Study Sites were reviewed in the field on July 30, 2026, and six were eliminated based on terrain, access, transmission line routing, and surrounding land use constraints. The two remaining sites were designated "Alternative Sites A and B" and evaluated in greater detail, including contact with the landowners, preliminary grading designs, and conceptual transmission line connections. Finally, through a quantitative and qualitative comparison of the Alternative Sites, the Siting Team identified Alternative Site A as the Venator Substation Project site.

V. VENATOR SITING STUDY DEVELOPMENT

Q. HOW WAS THE STUDY AREA DEFINED?

A. The Study Area, shown on Map 1 of the Siting Study, encompasses approximately 9,500 acres. The Study Area is generally bounded on the east by the existing Baker-Hanging Rock 765kV Transmission Line, on the west by the EastPark Industrial Park, on the south by Interstate 64, and on the north by the East Fork Little Sandy River.[1] These boundaries aid in selecting a site in proximity to both the existing 765kV transmission source and the customer site.

[1] Exhibit ESL-2, *Venator Substation Location Map*.

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

A. The Study Area is characterized by relatively steep topography and is primarily forested. Residential development occurs throughout the Study Area and is concentrated along main roads such as State Route 5, West Cobb Fork, and Angela Drive. Industrial uses are located at the eastern and western extents of the Study Area, including the industrial corridor along Virginia Boulevard and the EastPark Industrial Park. Agricultural fields, institutional uses such as the Ashland Community and Technical College, and community facilities such as the Boyd County Fairgrounds are also present. A significant portion of the Study Area has been previously surface mined and reclaimed, which has altered the natural contours of the land. Lastly, a 100-year regulatory floodway associated with Williams Creek bisects the Study Area from north to south.

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 Data were compiled from:

- Publicly available data sources, including parcel and ownership data, existing land use, aerial imagery, current and historical United States Geological Survey topographic mapping, transportation facilities, existing utility and pipeline corridors, and cultural resource data;
- The National Hydrography Dataset ("NHD"), the U.S. Fish and Wildlife Service ("USFWS") National Wetlands Inventory ("NWI"), Federal Emergency

Management Agency ("FEMA") floodplain mapping, and the National Land Cover Database ("NLCD");

- The USFWS Information for Planning and Consultation ("IPaC") system for federally listed threatened and endangered species; and
- A field review of the Study Sites from public roads and other public access points conducted on July 30, 2026, with the exception of Study Site 1 where the landowner granted permission to access the property.

Constraint data were mapped and used to identify, compare, and refine the Study Sites and Alternative Sites. Please refer to Sections 3 through 5 and Maps 1 through 6 of the Siting Study for additional information.

Q. PLEASE DESCRIBE THE STUDY SITES DEVELOPED FOR THE VENATOR SUBSTATION PROJECT.

A. Identification of Study Sites was constrained by the availability of land that was sufficiently large and generally level to accommodate a new 765kV substation. Study Sites were delineated to accommodate the approximate 1,600-foot by 1,900-foot footprint while considering terrain, residences, cemeteries, streams, and other constraints such as NWI wetlands and floodplains. Very few individual parcels were large enough to accommodate the footprint while avoiding or minimizing these constraints, so most Study Sites encompass multiple parcels and, in some cases, multiple property owners. The Siting Team also prioritized areas that had been previously cleared of trees, which may indicate more gradual terrain. Based on these considerations, the Siting Team identified eight Study Sites, which are shown on Map 2 and summarized in Table 1 of the Siting Study.

Q. WAS THE ENTIRE STUDY AREA AVAILABLE IN IDENTIFYING STUDY SITES?

A. No. Portions of the Study Area were constrained by residential and commercial development, particularly along State Route 5, Straight Creek Road, West Bayes, and Angela Drive; steep terrain and highwalls associated with past mining; the Williams Creek floodway and floodplain; streams and wetlands; cemeteries; and community facilities such as the Boyd County Fairgrounds. In addition, much of the remaining unmined land is located along State Route 5 near residential development, and construction on previously mined land may require additional geotechnical investigation to characterize the depth and extent of fill and inform foundation design.

Q. WHY WERE STUDY SITES 3 THROUGH 8 ELIMINATED FROM FURTHER CONSIDERATION?

A. Following the desktop evaluation and the July 30, 2026, field review, six Study Sites were eliminated for the following reasons:[2]

- Study Site 3 was eliminated primarily due to steep terrain, limited site access, and constraints on routing a 765kV transmission line to the site past the residential development along West Bayes and Angela Drive.
- Study Site 4 contains variable terrain that may require substantial grading, has limited access from Straight Creek Road, and is located between areas of residential development along State Route 5 and Straight Creek Road.

[2] Exhibit ESL-1, *Venator 765kV Substation Siting Study*, Table 1, "Summary of Study Sites," and accompanying discussion at 9–10.

- Study Site 5 is relatively flat but would require almost 10 miles of new 765kV transmission line and challenging routing across State Route 5 and U.S. 60.
- Study Site 6 has good access from Addington Road, but nearby commercial and industrial development limits transmission line routing options, and the site is adjacent to the Boyd County Fairgrounds, an active recreational and event area within the community.
- Study Site 7 is relatively flat with good access from Buena Vista Drive but would require a longer connection to the existing 765kV transmission line and portions of up to six separately owned parcels, and potential cemeteries were identified in its vicinity.
- Study Site 8 is located partly within a large topographic depression surrounded by steep terrain; access from Angela Drive would require traversing steep terrain behind a recently developed residential area, and access from West Cobb Fork is blocked by a steep, rocky highwall.

Q. PLEASE DESCRIBE THE RESULTING ALTERNATIVE SITES.

A. Based on the desktop evaluation and field review, Study Sites 1 and 2 were retained and designated Alternative Sites A and B, respectively, as shown on Map 3 of the Siting Study. Following their selection, the preliminary substation footprints were refined to better fit the available buildable area at each site.

Alternative Site A is in the eastern portion of the Study Area, adjacent to an industrial corridor along Virginia Boulevard.[3] The site consists primarily of flat, open grassland and pasture previously used for cattle grazing. The footprint is located on one

[3] Exhibit ESL-3, *Venator Substation Overlay*.

parcel totaling approximately 316 acres. An existing gravel driveway provides direct access from Virginia Boulevard. The Baker-Hanging Rock 765kV Transmission Line is approximately 0.5 mile east of the site, and the customer site is approximately 2.5 miles west. Following selection of Alternative Sites, the preliminary substation footprints were refined to better accommodate the available buildable area at each site. The footprint for Alternative Site A was adjusted to maximize use of the existing open pastureland and minimize grading, resulting in a reduced footprint of approximately 45 acres.

Alternative Site B is in the western portion of the Study Area, adjacent to Technology Drive and the Ashland Community and Technical College. The site encompasses portions of several parcels totaling approximately 170 acres that were recently acquired by TeraWulf. Although topographic mapping indicates areas of steeper terrain, field reconnaissance confirmed that much of the site has been previously graded and cleared. An existing dirt road provides access from Technology Drive, and no known residences are located within approximately 1,500 feet of the site footprint. The existing 765kV transmission line is approximately two miles from the site, and the customer site is less than one mile to the west. Due to space and terrain constraints, a smaller footprint of approximately 1,500 feet by 1,500 feet, or approximately 52 acres, was considered.

Q. WERE EXTERNAL STAKEHOLDERS INFORMED ABOUT THE SITING PROCESS?

A. Yes. Kentucky Power real estate representatives contacted the landowners of both Alternative Sites to assess property availability, collect input, and obtain permission to survey. Kentucky Power outreach teams distributed various printed materials to area landowners and residents to provide project information, solicit feedback and inform of an

open house regarding transmission line routes. Landowners in the project area were also notified via phone of the open house on October 12, 2026.[4] The open house was held on October 15, 2026, to provide stakeholders with the opportunity to speak with Kentucky Power representatives. Further, Kentucky Power provided a news release on the Kentucky Power website and in print with *The Daily Independent*.[5] In addition, Kentucky Power and the Siting Team met with Eric Chaney, the Boyd County Judge-Executive, on August 27, 2026, to present the Venator Substation Project site and solicit input. Boyd County representatives did not express any concerns regarding the Venator Substation Project site.

VI. RESULTS OF THE SITING STUDY

Q. HOW DID THE ALTERNATIVE SITES COMPARE WITH RESPECT TO THE NATURAL ENVIRONMENT?

A. Neither Alternative Site footprint intersects the FEMA 100-year floodplain. Based on NHD and NWI data, Alternative Site A has two NHD flowlines and two NWI wetlands within 1,000 feet of the substation footprint, and Alternative Site B has one NHD flowline and four NWI wetlands within 1,000 feet of the footprint. A major differentiator is stream impacts: Alternative Site B would require significant impacts to a stream to accommodate the substation footprint, whereas Alternative Site A avoids impacts to NHD-mapped streams. Both sites are predominantly pasture/hay; Alternative Site B has deciduous and mixed forest along the border of the footprint and would require over two acres of tree clearing, while Alternative Site A is largely open pasture with only small, forested patches to the north and southwest. The IPaC review identified the same federally listed and

[4] Exhibit ESL-4, *Muskie-Venator Outreach*.

[5] Exhibit ESL-5, *Muskie-Venator News Release*.

proposed species for both sites, with the exception of the pink mucket mussel, which was identified only for Alternative Site A.[6]

Q. HOW DID THE ALTERNATIVE SITES COMPARE WITH RESPECT TO THE HUMAN ENVIRONMENT?

A. Both Alternative Sites are in predominantly industrial and institutional areas rather than the residential areas concentrated along State Route 5, West Cobb Fork, and Angela Drive. Both contain previously mined areas, and parcel data lists both as "No Zoning." Both Alternative Sites are located in unincorporated Boyd County, which has not adopted planning or zoning outside incorporated cities. At Alternative Site A, an existing residence and several outbuildings are located on the parcel and would be removed as part of the acquisition from a willing seller; three cemeteries are located on the property but outside the substation footprint; and a natural gas pipeline crossing the parcel can be avoided by the substation footprint. Alternative Site B has no known residences within approximately 1,500 feet and no nearby cemeteries. The owner of the parcel indicated that the property is likely to be used for future development.[7]

Q. HOW DID THE ALTERNATIVE SITES COMPARE WITH RESPECT TO ENGINEERING AND CONSTRUCTABILITY?

A. Based on preliminary grading, Alternative Site A would require approximately 308,548 cubic yards of cut and 62,182 cubic yards of fill. Alternative Site B would require approximately 2,000,000 cubic yards of cut and 1,900,000 cubic yards of fill, or roughly 10 times the total earthwork of Alternative Site A. Each site requires two 765kV

[6] Exhibit ESL-1, *Venator 765kV Substation Siting Study*, Section 5.3, "Alternative Site Comparison," subsection "Natural Environment," at 16.

[7] Exhibit ESL-1, *Venator 765kV Substation Siting Study*, Section 5.3, "Alternative Site Comparison," subsection "Human Environment," at 17.

connections to the existing transmission system. The connections to Alternative Site A total less than approximately 2.5 miles, while the connections to Alternative Site B total approximately 5.5 miles and would cross State Route 5 at two separate locations. Conversely, the two parallel 345kV lines to the customer site would each be approximately three miles long from Alternative Site A and approximately 0.5 mile long from Alternative Site B.[8]

Shorter 765kV connections at Alternative Site A outweigh its longer 345kV connections, due to the increased right-of-way widths, structure sizes, and costs of 765kV construction versus 345kV construction. Further, the two 345kV lines can be parallel to each other over State Route 5 and Williams Creek.

Q. WHICH ALTERNATIVE SITE WAS SELECTED AS THE VENATOR SUBSTATION PROJECT SITE?

A. The Siting Team recommended Alternative Site A as the Venator Substation Project site, as shown on Map 6 of the Siting Study.

Q. WHY DID THE SITING TEAM RECOMMEND ALTERNATIVE SITE A AS THE VENATOR SUBSTATION PROJECT SITE?

A. The Siting Team selected Alternative Site A because it best addresses the siting goals outlined in Section 2.2 of the Siting Study and discussed earlier in my Direct Testimony.[9] Alternative Site A provides relatively flat, open terrain with substantially lower grading and clearing requirements than Alternative Site B. It is located closest to the existing Baker-Hanging Rock 765kV Transmission Line, minimizing the length of new 765kV

[8] Exhibit ESL-1, *Venator 765kV Substation Siting Study*, Section 5.3, "Alternative Site Comparison," subsection "Engineering," at 17–18.
[9] Exhibit ESL-6, *Venator Alternatives Comparison* summarizes the comparison of Site A and Site B from Exhibit ESL-1, *Venator 765kV Substation Siting Study*.

transmission line needed to connect the substation to the existing transmission system. The site has direct access from Virginia Boulevard and sufficient acreage to accommodate the substation while avoiding the FEMA-mapped floodplain, NHD- and NWI-mapped streams and wetlands, known cemeteries, and the existing natural gas pipeline. The subsequent field delineation indicated that features potentially under United States Army Corps of Engineers ("USACE") jurisdiction can also be avoided by the substation footprint and grading. The footprint can be accommodated on a single parcel, and the landowner was willing to sell, allowing Kentucky Power to secure an option to purchase the property.

In comparison, Alternative Site B would require substantially greater grading, impacts to a stream, over two acres of tree clearing, longer connections to the existing 765kV transmission line with two crossings of State Route 5, and acquisition of property its owner has identified for future development and whose availability for acquisition is uncertain.[10] The Siting Team concluded that Alternative Site A best meets the goals of the Venator Substation Project and represents a reasonable balance between impacts on the natural and human environments while meeting the operational needs of the Venator Substation Project.

Q. IN YOUR PROFESSIONAL OPINION, IS ALTERNATIVE SITE A THE MOST REASONABLE LOCATION FOR THE VENATOR SUBSTATION PROJECT?

A. Yes. The Siting Team followed a reasonable and well-documented process that considered a broad range of sites, eliminated sites with significant terrain, access, routing, and land use constraints, and compared the remaining Alternative Sites using consistent natural environment, human environment, and engineering criteria. In my opinion, the Venator

[10] Exhibit ESL-1, *Venator 765kV Substation Siting Study*, Section 5.3, "Alternative Site Comparison," subsection "Engineering," at 17–18.

Substation Project site reasonably minimizes impacts on the natural and human environments while meeting the engineering and operational requirements of the Venator Substation Project.

VII. VENATOR SUBSTATION PROJECT SITE

Q. PLEASE DESCRIBE THE VENATOR SUBSTATION PROJECT SITE.

A. The Venator Substation Project site is located in the eastern portion of the Study Area off Virginia Boulevard, approximately 0.5 mile west of the Baker-Hanging Rock 765kV Transmission Line and approximately 2.5 miles east of the customer site. Kentucky Power has secured an option to purchase the parcel where Alternative Site A is located. The substation footprint of approximately 45 acres is located on open pastureland, and access will be provided from Virginia Boulevard using the existing gravel driveway.[11] The Venator Substation Project layout is provided as Attachment A to the Siting Study.

Q. PLEASE DESCRIBE ANY ADDITIONAL ACTIVITIES CONDUCTED AT THE VENATOR SUBSTATION PROJECT SITE.

A. Prior to obtaining the option to purchase, Kentucky Power conducted several studies to further vet the Venator Substation Project site, including a wetland delineation, a threatened and endangered species habitat assessment, and a Phase I cultural resources survey. The results of the surveys completed did not indicate any fatal flaws, regarding environmental permitting, that would preclude the use of the parcel to build the Venator Substation Project.

[11] Exhibit ESL-7, *Photographs Venator Substation Site*.

VIII. PERMITTING AND ENVIRONMENTAL STUDIES

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

A. Kentucky Power is completing several environmental studies, as described below. Additional coordination with state and/or federal agencies and permits may be needed prior to construction of the Venator Substation Project:

A wetland delineation and stream identification study is in the process of being completed for the anticipated disturbance area of the Venator Substation Project site. Burns & McDonnell conducted a wetland and waterbody delineation on August 11–14 and August 25–27, 2026, on a portion of the 316-acre parcel associated with the proposed site. A total of 74 wetlands (including one pond) and 27 stream channels were identified. One wetland and three stream channels appear to have a hydrological connection to other probable waters of the United States and are considered to be potentially under USACE jurisdiction. The remaining features appear to be isolated and are potentially not under USACE jurisdiction. It is expected that potential USACE jurisdictional features can be avoided by the substation footprint and grading. A request for an Approved Jurisdictional Determination will be submitted to the USACE to confirm jurisdictional and isolated features.

Because the total earth disturbance will be greater than one acre, coverage under the Kentucky Pollutant Discharge Elimination System ("KPDES") construction stormwater general permit will be required from the Kentucky Division of Water ("KDOW"), and a Stormwater Pollution Prevention Plan ("SWPPP") will be developed for the Venator Substation Project.

Kentucky Power will coordinate with the USFWS and the Kentucky Department of Fish and Wildlife Resources ("KDFWR") regarding the potential for impacts to sensitive species. The IPaC review identified the endangered gray bat and Indiana bat, the proposed endangered tricolored bat, the endangered pink mucket mussel, the proposed endangered salamander mussel, and the proposed threatened monarch butterfly. A threatened and endangered species habitat assessment is in the process of being completed for the Venator Substation Project site. Only one area exhibited high suitability for bat species, as it contained a number of large white oak trees (*Quercus alba*) with exfoliating bark that could serve as potential roost locations. However, no impacts to this forested area are proposed for the Venator Substation Project. The Venator Substation Project is not anticipated to jeopardize the continued existence of the tricolored bat, salamander mussel, and monarch butterfly. Because the Venator Substation Project site is primarily open pasture, tree clearing is expected to be limited, and any clearing will be coordinated with the USFWS and KDFWR, including seasonal clearing restrictions or other conservation measures for listed bats as appropriate.

A Phase I cultural resources survey is in the process of being completed for the anticipated disturbance area of the Venator Substation Project site and will be coordinated with the Kentucky Heritage Council and the Kentucky Office of State Archaeology, including under Section 106 of the National Historic Preservation Act, if a federal permit is required. On August 4–6, 2026, Burns & McDonnell conducted an intensive Phase I cultural resources survey for the Venator Substation Project. A total of 102 shovel test probes were excavated and no archaeological resources were identified.

In addition to the environmental permits, engineering-related permits will be filed with the appropriate agencies or companies once the substation design is completed. It is anticipated that these may include an entrance permit for access from Virginia Boulevard from the Kentucky Transportation Cabinet or Boyd County; and coordination with the operator of the natural gas pipeline crossing the property. Because the substation will include equipment approximately 175 feet tall, the Company will evaluate whether notice to the Federal Aviation Administration under 14 C.F.R. Part 77 is required based on final structure heights and proximity to public-use airports.

Q. HAVE ANY OF THE ENVIRONMENTAL PERMITS BEEN OBTAINED FOR THE PROJECT?

A. No permits have been obtained to date. Kentucky Power will obtain all required permits and approvals prior to beginning construction of the Venator Substation Project.

VIII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Exhibit ESL-1

Venator 765kV Substation Siting Study

Substation Siting Study

Venator 765 kV Substation Project
Case No. 2026-00324

Prepared for:

KENTUCKY POWER
An AEP Company

Prepared by:

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BURNS McDONNELL

October 2026

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ATTACHMENTS

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1.0 INTRODUCTION

Kentucky Power Company (Kentucky Power), a subsidiary of American Electric Power Company, Inc. (AEP), is proposing the Venator 765 kilovolt (kV) Substation Project to serve a customer, TeraWulf, in Boyd County, Kentucky (the "Project"). TeraWulf has requested a reliable power source for its planned data center in the EastPark Industrial Park. To meet the customer needs Kentucky Power will need to build a new 765 kV substation near the Baker - Hanging Rock 765 kV Transmission Line. The new substation will provide electrical infrastructure needed to serve the facility and support continued economic development opportunities in the region. Kentucky Power must deliver the initial 100 megawatts (MW) by October 2028, ramping to 500 MW by April 2029.

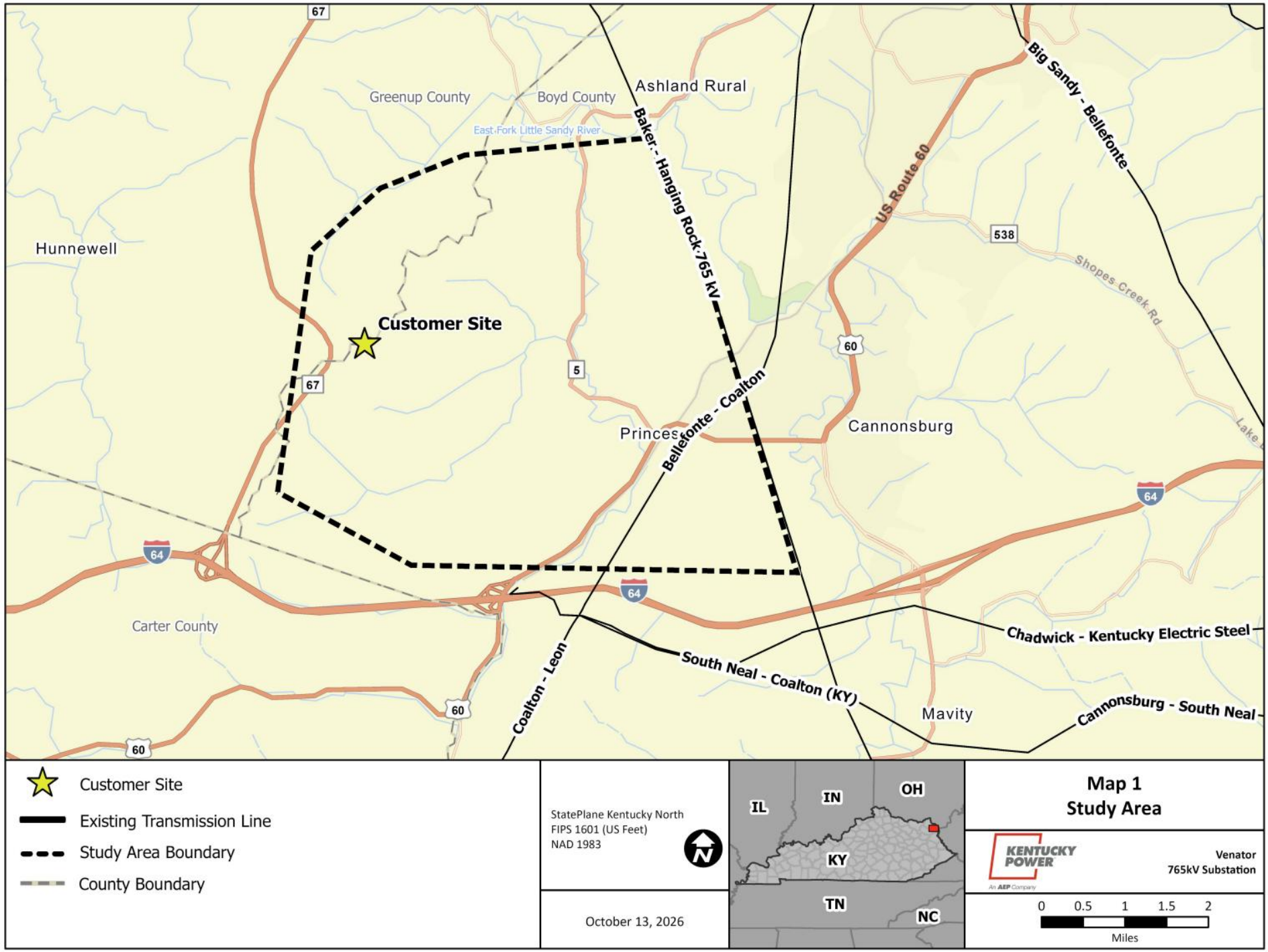
2.0 PROPOSED SUBSTATION AND CONSTRUCTION DESCRIPTION

At the start of the substation selection process, substation engineers determined the need for an approximately 1,600' x 1,900' gravel-fenced area to build the substation. The site should be approximately 70 acres in order to accommodate the construction of the proposed substation, including access, grading and associated stormwater controls. The Venator Substation will be supplied from AEP's existing Baker – Hanging Rock 765 kV Transmission Line by two greenfield 765kV transmission line connections and will serve the customer site by two greenfield 345 kV transmission lines. The final location of the proposed transmission lines will be addressed in a separate Siting Study and state filing.

Ground surveys, geotechnical surveys, and environmental field surveys are necessary prior to final substation design and construction. Typical substation construction activities include vegetation clearing, grading activity, installation of associated stormwater controls, and installation of substation equipment. Construction activities can create temporary inconveniences such as traffic delays, increased heavy equipment traffic, dust, and noise.

2.1 Proposed Substation General Location

The location for the proposed substation must meet the Project's electrical needs and customer requirements. The Study Area is generally bounded to the east and west by the existing Baker – Hanging Rock 765 kV Transmission Line and the EastPark Industrial site, respectively. The southern boundary of the Study Area remains north of Interstate 64, and the northern boundary remains south of the East Fork Little Sandy River. A new substation in the Study Area (i) is in proximity to the existing Baker - Hanging Rock 765 kV Transmission Line (the proposed source to the proposed substation) and (ii) is in proximity to the customer site. The Study Area is shown on Map 1 below.


Greenup County
Boyd County
Ashland Rural
East Fork Little Sandy River
Baker - Hanging Rock 765 kV
Big Sandy - Bellefonte
US Route 60
538
Shopes Creek Rd
Hunnewell
Customer Site
67
5
60
Bellefonte - Coalton
Princes
Cannonsburg
64
Carter County
Chadwick - Kentucky Electric Steel
South Neal - Coalton (KY)
Coalton - Leon
Mavity
Cannonsburg - South Neal
Customer Site
Existing Transmission Line
Study Area Boundary
County Boundary
StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983
October 13, 2026
IL
IN
OH
KY
TN
NC
Map 1
Study Area
KENTUCKY POWER
An AEP Company
Venator
765kV Substation
0 0.5 1 1.5 2
Miles

The Study Area is characterized by relatively steep topography and is primarily forested, with residential development scattered throughout the Study Area and industrial uses on the eastern and western extents. There is a mix of agricultural fields, industrial development, and residential areas, particularly along Route 5. A significant portion of the Study Area has been previously mined and reclaimed. Lastly, there is a 100-Year Regulatory Floodway associated with Williams Creek bisecting the Study Area north to south. The Study Area is approximately 9,500 acres.

2.2 Goals of the Substation Siting Study

The overall goal of the 765 kV Venator Substation Siting Study (the "**Substation Siting Study**") is to evaluate potential sites within the Study Area and identify a suitable substation site that represents a balance between impacts on the natural and human environments while meeting the engineering and operational needs of the Project. To the extent reasonable and practical, the proposed site is the site that:

- Considers safety in aspects of the station's construction, operation and maintenance.
- Is located in the defined Study Area (as described in Section 1.2) and in reasonable proximity to the transmission line source and customer site.
- Reasonably minimizes adverse impacts on the natural and human environments from the construction of the proposed substation and associated transmission line entrances and exits.
- Meets the Project's site engineering and operational requirements, which can include, but are not limited to: space and clearance requirements; access road requirements such as slopes, turning radius, and line of sight; site development requirements such as grading, existing contaminants, and geotechnical; distribution and transmission line exit requirements; and existing infrastructure conflicts such as sewer and water lines.
- The station site selection and associated line routes will fairly consider the environmental impacts on the surrounding community and area.
- Has a willing seller; however, there are exceptions where this is not always practical or reasonable.
- Minimizes special design requirements and unreasonable costs.
- Can be constructed and operated in a safe, timely, cost-effective, and reliable manner.

3.0 SUBSTATION SITE IDENTIFICATION PROCESS

The following provides a general overview of the typical process used to identify a suitable substation site for a project. The process is modified and adapted depending on location, regulatory requirements, and unique project needs.

The substation site identification process begins by assembling a multi-disciplinary team with a wide range of experiences. Team member expertise includes (but not limited to) transmission siting, environmental impact assessment, impact mitigation, engineering, construction management, project management, electrical system planning, and public relations (the "**Siting Team**"). The Siting Team includes AEP employees and outside consultants. Additional expertise is added depending on the project needs.

Next, **Constraints and Opportunity Features** are mapped within the **Study Area**. The initial Constraints and Opportunity features are typically identified using readily available public data sources (property lines, existing land uses, natural resources, cultural resources, transportation facilities, existing utility and linear features, base mapping, etc.) and supplemented with stakeholder input and field inspections.

Once the Study Area and Constraints and Opportunity Features are identified, the **Siting Team** identifies **Study Sites** (typically less than 10 sites) adhering to the goals (outlined in Section 1.3) and a series of general siting and technical guidelines The number of Study Sites could be numerous, low, or even limited to one depending on the project specifics.

The Siting Team conducts field inspections of the Study Sites and surrounding area generally from public roads (focusing on environmental constraints and engineering/operational requirements) and refine or eliminates the Study Sites. The remaining sites are the **Alternative Sites** (typically less than five sites) and are studied in more detail.

Company real estate specialists contact the landowners of the Alternative Sites to measure interest in selling, collect input, and to obtain permissions to survey. Local officials and key stakeholders are interviewed as needed. Additionally, further studies and examinations are completed as needed. Depending on the project, these could include, but are not limited to: conceptual grading plans, conceptual transmission line entrances and exits, geotechnical investigations including core bores, environmental field surveys, ground surveys, previous use research, contaminants investigations, title search, etc. Ultimately, through a quantitative and qualitative analysis and comparison of the Alternative Sites, the Siting Team identifies a **Proposed Substation Site,** which is the most suitable site that meets the goals of the Substation Siting Study (Section 1.3).

4.0 STUDY SITES

Identification of potential Study Sites within the Study Area was constrained by the availability of land that was sufficiently large and generally level to accommodate construction of a new 765 kV substation. The Study Area has been extensively mined, particularly within its western and eastern portions. Much of the remaining unmined land is located along State Route 5 and in proximity to residential development. Construction on previously mined land may require additional geotechnical investigations to characterize subsurface conditions, including the depth and extent of fill, and to inform foundation design.

Study Sites were delineated to accommodate the approximate required substation footprint of 1,600 feet by 1,900 feet while considering terrain and other siting constraints. Very few individual parcels were large enough to accommodate the anticipated footprint while also avoiding or minimizing constraints such as residences, cemeteries, and streams. As a result, most Study Sites encompass multiple parcels and, in some cases, multiple property owners. The Siting Team also prioritized areas that had been previously cleared of trees, which may provide an initial indication of more gradual terrain. Based on these considerations, the Siting Team identified eight Study Sites within the Study Area, labeled **Sites 1 through 8** on Map 2. A summary of the eight Study Sites is provided in Table 1.

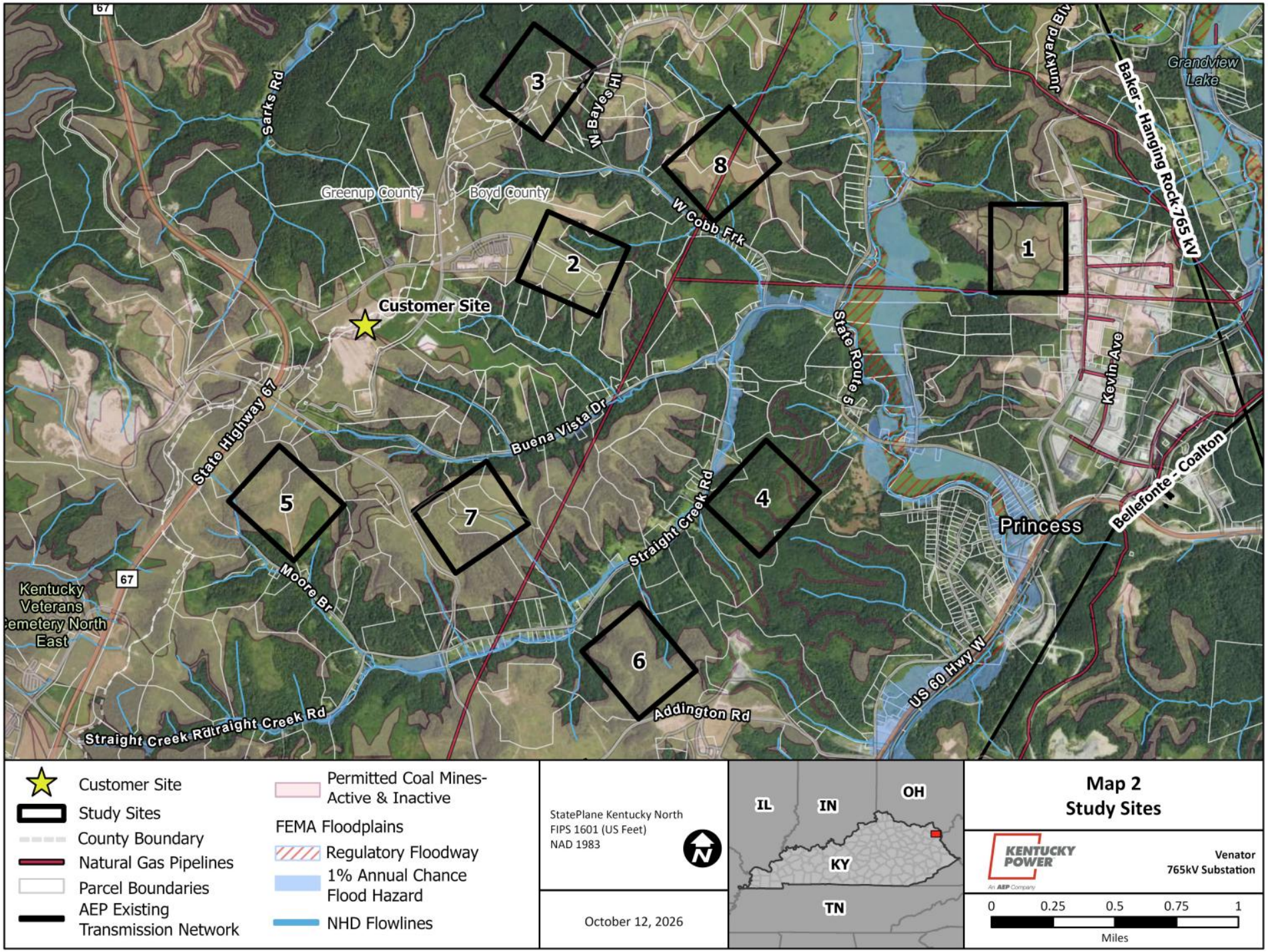

67
Sarks Rd
W Bayes Hl
Greenup County
Boyd County
W Cobb Frk
Junkyard Blv
Baker - Hanging Rock 765 kV
Grandview Lake
Customer Site
State Route 5
Kevin Ave
State Highway 67
Buena Vista Dr
Straight Creek Rd
Bellefonte - Coalton
Princess
Moore Br
Kentucky Veterans Cemetery North East
US 60 Hwy W
Addington Rd
Straight Creek Rd
1
2
3
4
5
6
7
8
Customer Site
Study Sites
County Boundary
Natural Gas Pipelines
Parcel Boundaries
AEP Existing Transmission Network
Permitted Coal Mines- Active & Inactive
FEMA Floodplains
Regulatory Floodway
1% Annual Chance Flood Hazard
NHD Flowlines
StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983
October 12, 2026
IL
IN
OH
KY
TN
Map 2
Study Sites
KENTUCKY POWER
An AEP Company
Venator
765kV Substation
0
0.25
0.5
0.75
1
Miles

Table 1: Summary of Study Sites	
Study Site	**Site Description**
1	Study Site 1 is located closest to the existing 765 kV transmission line. The site consists of a large agricultural property with a residence characterized by wide, relatively flat, open fields primarily used for pasture. Although the property is primarily agricultural, it is located within a developed industrial corridor along Virginia Boulevard, with nearby roofing, oil, automotive, general contracting, propane, and other commercial and industrial businesses. The parcel extends from Virginia Boulevard to State Route 5, with mapped floodplain and floodway areas occurring within a low-lying portion of the property closer to State Route 5. Study Site 1 is located outside of the mapped floodplain and adjacent to the industrial area along Virginia Boulevard. The Study Site encompasses one parcel that is approximately 316 acres. Three known cemeteries are located within the property; however, the cemeteries are situated outside of the Study Site footprint and appear to be avoidable by the proposed infrastructure.
2	Study Site 2 is located adjacent to the Ashland Community and Technical College and closer to the customer site, but farther from the existing 765 kV transmission line. Historic topographic mapping indicates rolling terrain with some variation in elevation, while more recent aerial imagery indicates that portions of the site may have been cleared and graded as part of the EastPark Industrial Park development. An NHD-mapped stream is located within the approximate Study Site footprint and represents a constraint to accommodating the anticipated substation footprint. Further evaluation of the site layout would be necessary to determine whether the stream could be avoided or whether modifications to the substation layout would be required. Study Site 2 would provide a relatively short connection to the customer site but would require a longer connection to the existing 765 kV transmission line. The Study Site encompasses several parcels, including parcels identified as owned by the Commonwealth of Kentucky and a land-holding LLC; however, additional ownership research indicates that TeraWulf recently acquired most of the parcels included within Study Site 2.
3	Study Site 3 is located north of the Ashland Community and Technical College and EastPark Industrial Park and farther from the existing 765 kV transmission

Table 1: Summary of Study Sites	
Study Site	**Site Description**
	line. The site is partially cleared, with substantial portions remaining forested. The site also contains areas of steeper terrain, which reduces the amount of land potentially suitable for construction of the substation. No mapped streams or other environmental constraints identified during the desktop review occur within the approximate Study Site footprint. However, moderately dense residential development is located immediately east of the site along West Bayes and Angela Drive. The proximity of this residential development may constrain potential 765 kV transmission line routes connecting the Study Site to the existing transmission line. Parcels included within the preliminary Study Site footprint are owned by TeraWulf.
4	Study Site 4 is located between State Route 5 and Straight Creek Road and is predominantly forested. The site is located approximately midway between the existing 765 kV transmission line and the customer site. The Study Site footprint can be accommodated primarily within a single approximately 130-acre parcel. No mapped floodplains, streams, or wetlands occur within the approximate Study Site footprint. Residential development along State Route 5 and Straight Creek Road may constrain potential transmission line routes entering and exiting the Study Site. The site also contains variable terrain that may require substantial grading to accommodate construction of the substation.
5	Study Site 5 is located immediately south of the customer site, providing a relatively short connection to the proposed customer facilities. The site is the farthest of the Study Sites from the existing 765 kV transmission line and would therefore require a longer 765 kV transmission line connection. Moore Branch, a small named stream, is located within the southwestern portion of the property, along with several small NWI-mapped wetland features. Further evaluation of the site layout would be necessary to determine whether these features could be avoided or whether modifications to the substation layout would be required. The area has been almost entirely previously mined and is largely cleared of forested vegetation. Terrain within the cleared portions of the property appears relatively flat. The Study Site encompasses two large parcels under separate ownership that collectively comprise approximately 150 acres.

Table 1: Summary of Study Sites	
Study Site	**Site Description**
6	Study Site 6 is located between Straight Creek Road and Addington Road and adjacent to the Boyd County Fairgrounds, which hosts several festivals and other events throughout the year. The site has been previously mined and consists of a mix of cleared land and forested areas. One small NHD-mapped stream occurs within the Study Site; however, its location may allow the feature to be avoided through refinement of the substation layout. The Study Site is located primarily within a single approximately 165-acre parcel owned by a land-holding company.
7	Study Site 7 is located immediately east of Site 5, between Addington Road and Buena Vista Drive, and is near the customer site but farther from the existing 765 kV transmission line. The area has been almost entirely previously mined and is largely cleared of forested vegetation within the approximate Study Site footprint. One NHD-mapped stream intersects a small portion of the Study Site footprint and may require consideration during further evaluation of the site layout. Lastly, a cemetery appears to be located on the property, which could limit where the station footprint could be located. A key siting consideration for Study Site 7 is the number of parcels required to accommodate the anticipated substation footprint. The Study Site encompasses portions of up to six parcels, which appear to be under separate ownership.
8	Study Site 8 is located farther north within the Study Area and is approximately equidistant from the existing 765 kV transmission line and the customer site. A portion of the Study Site appears to be cleared and relatively flat; however, the surrounding areas contain steeper terrain to the north and south of the potential substation footprint. Access to the Study Site is limited and would likely need to be provided from Angela Drive, which is adjacent to a recently developed residential area. Developing access from Angela Drive may require substantial grading through areas of steep terrain. Access from Cobb Fork appears to be constrained by a steep, rocky highwall.

The eight Study Sites were reviewed in the field on July 30, 2026, to further assess site conditions and identify the most viable sites for additional evaluation. In general, terrain at Study Sites 2, 3, 5, and 7 appeared less steep during the field review than anticipated based on historic topographic mapping.

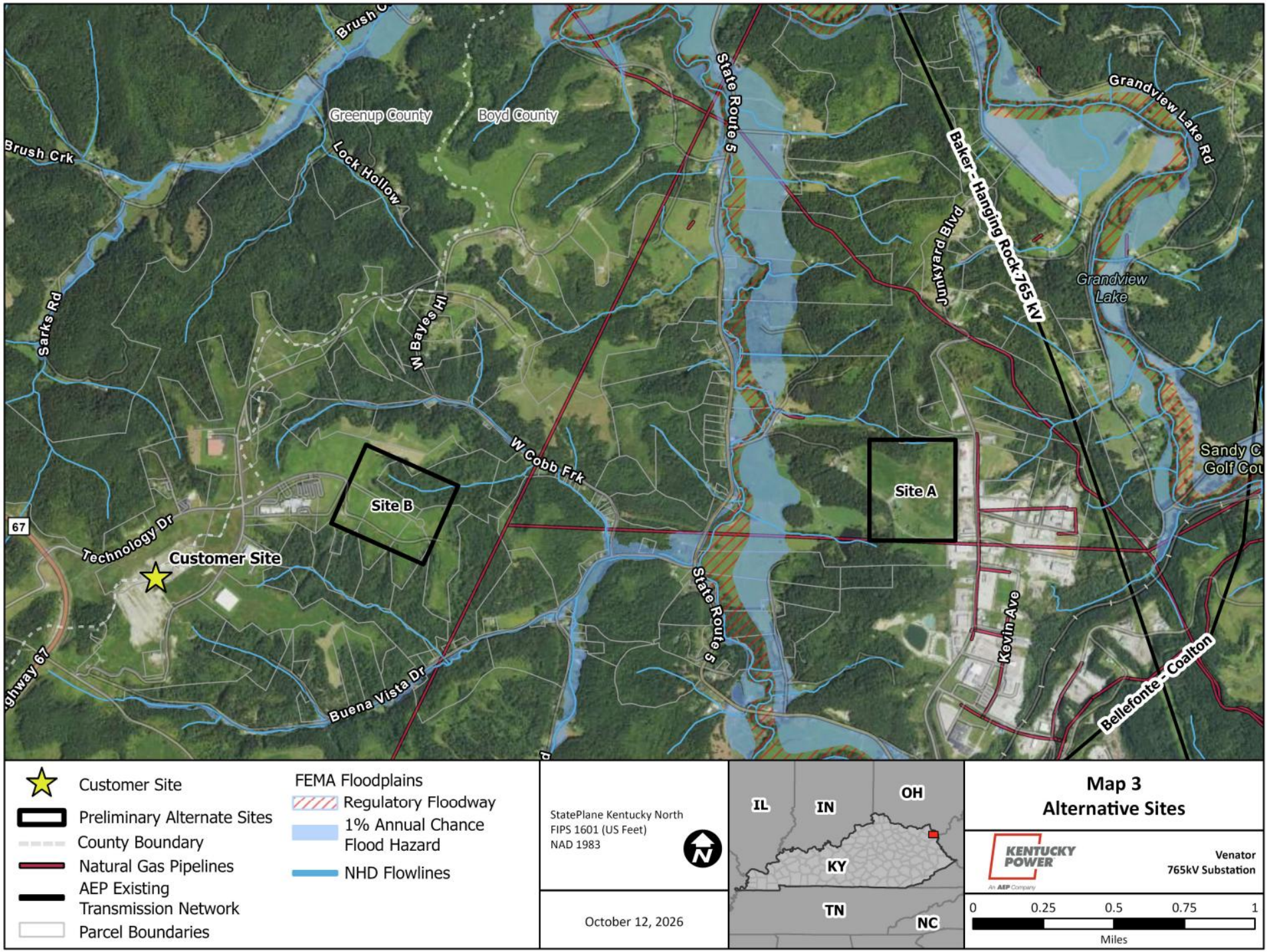
Study Sites 4, 5, 6, and 7, located in the southern portion of the Study Area. All were eliminated from further consideration based on a combination of transmission routing, terrain, access, and surrounding land use constraints. Study Site 4 contains variable terrain that may require substantial grading. The site also has limited access from Straight Creek Road and is located between areas of residential development along State Route 5 and Straight Creek Road. Site 5 is relatively flat based on the field review, but the length of required 765 kV transmission lines (almost 10 miles of new 765 kV transmission line) and challenging routing across State Route 5 and US 60 led to its elimination. Study Site 6 has good access from Addington Road; however, nearby commercial and industrial development limits potential transmission line routing options. The site is also adjacent to the Boyd County Fairgrounds, an active recreational and event area within the community.

Study Site 7 appeared relatively flat during the field review and has good access from Buena Vista Drive; however, the site would require a longer connection to the existing 765 kV transmission line. In addition, the anticipated substation footprint would require portions of multiple separately owned parcels, resulting in a potentially more complex property acquisition. Potential cemeteries identified in the vicinity of the Study Site represent an additional siting consideration. Based on these considerations, Study Site 7 was eliminated from further evaluation.

Study Site 3, located in the northern portion of the Study Area, was eliminated from further consideration primarily due to areas of steep terrain, limited site access, and constraints associated with routing a 765 kV transmission line to the site.

Study Site 8 was also eliminated from further consideration based primarily on terrain and access constraints. A portion of the site is located within a large topographic depression, with steep terrain surrounding portions of the potential substation footprint. The site is located behind a recently developed residential area, and access from Angela Drive would require traversing areas of steep terrain. Suitable access from West Cobb Fork was not identified during the field review due to the presence of a steep, rocky high wall.

Based on the desktop evaluation and subsequent field review, Study Sites 1 and 2 were retained for further evaluation and designated Alternative Sites A and B, respectively and shown on Map 3.


Brush Crk
Greenup County
Boyd County
Lock Hollow
State Route 5
Baker - Hanging Rock 765 kV
Grandview Lake Rd
Junkyard Blvd
Grandview Lake
Sarks Rd
W Bayes Hl
W Cobb Frk
Site A
Site B
Technology Dr
Customer Site
67
State Route 5
Kevin Ave
Buena Vista Dr
Bellefonte - Coalton
Customer Site
Preliminary Alternate Sites
County Boundary
Natural Gas Pipelines
AEP Existing Transmission Network
Parcel Boundaries
FEMA Floodplains
Regulatory Floodway
1% Annual Chance Flood Hazard
NHD Flowlines
StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983
October 12, 2026
IL
IN
OH
KY
TN
NC
Map 3
Alternative Sites
Venator
765kV Substation
0
0.25
0.5
0.75
1
Miles

5.0 ALTERNATIVE SITES

5.1 Alternative Site A Description

Alternative Site A is located in the eastern portion of the Study Area, adjacent to an industrial area along Virginia Boulevard. The site consists primarily of flat, open grassland and pasture that was previously used for cattle grazing. Three known cemeteries are located within the approximately 316-acre property, however, none of these intersect with the proposed substation footprint. An existing residence and several outbuildings are located within or adjacent to the proposed substation footprint. If Alternative Site A is selected, the existing residence and outbuildings within the site would require removal.

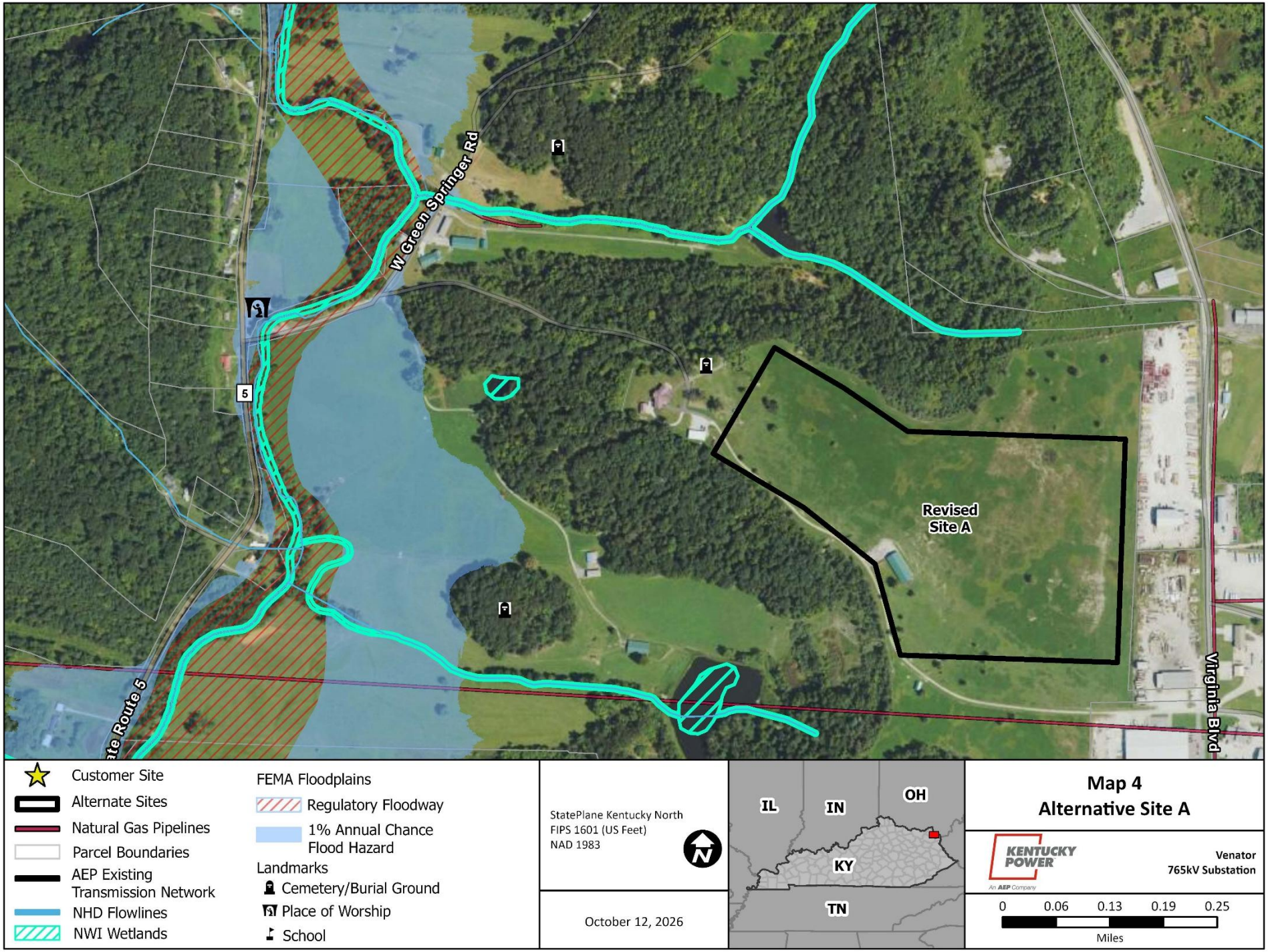
Alternative Site A is located on one parcel totaling approximately 316 acres. An existing gravel driveway provides direct access to Virginia Boulevard. The Baker - Hanging Rock 765 kV Transmission Line is approximately 0.5 miles east of the site, providing a relatively short connection to the existing transmission system, while the customer site is approximately 2.5 miles west. Following selection of Alternative Sites, the preliminary substation footprints were refined to better accommodate the available buildable area at each site. The footprint for Alternative Site A was adjusted to maximize use of the existing open pastureland and minimize required grading (approximately 45-acre footprint) and shown on Map 4.



Photograph 1. Southeast portion of site facing northwest



Photograph 2. Central portion of site facing east


W Green Springer Rd
5
Revised
Site A
Virginia Blvd
Customer Site
Alternate Sites
Natural Gas Pipelines
Parcel Boundaries
AEP Existing
Transmission Network
NHD Flowlines
NWI Wetlands
FEMA Floodplains
Regulatory Floodway
1% Annual Chance
Flood Hazard
Landmarks
Cemetery/Burial Ground
Place of Worship
School
StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983
October 12, 2026
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KY
TN
Map 4
Alternative Site A
KENTUCKY POWER
An AEP Company
Venator
765kV Substation
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0.06
0.13
0.19
0.25
Miles

5.2 Alternative Site B Description

Alternative Site B is located in the western portion of the Study Area, adjacent to Technology Drive and the Ashland Community and Technical College. The site encompasses portions of several parcels totaling approximately 170 acres, which have recently been acquired by the customer. Although available topographic mapping indicates areas of steeper terrain, field reconnaissance confirmed that much of the proposed site has been previously graded and cleared for future development. Alternative Site B consists primarily of grassland and pasture.

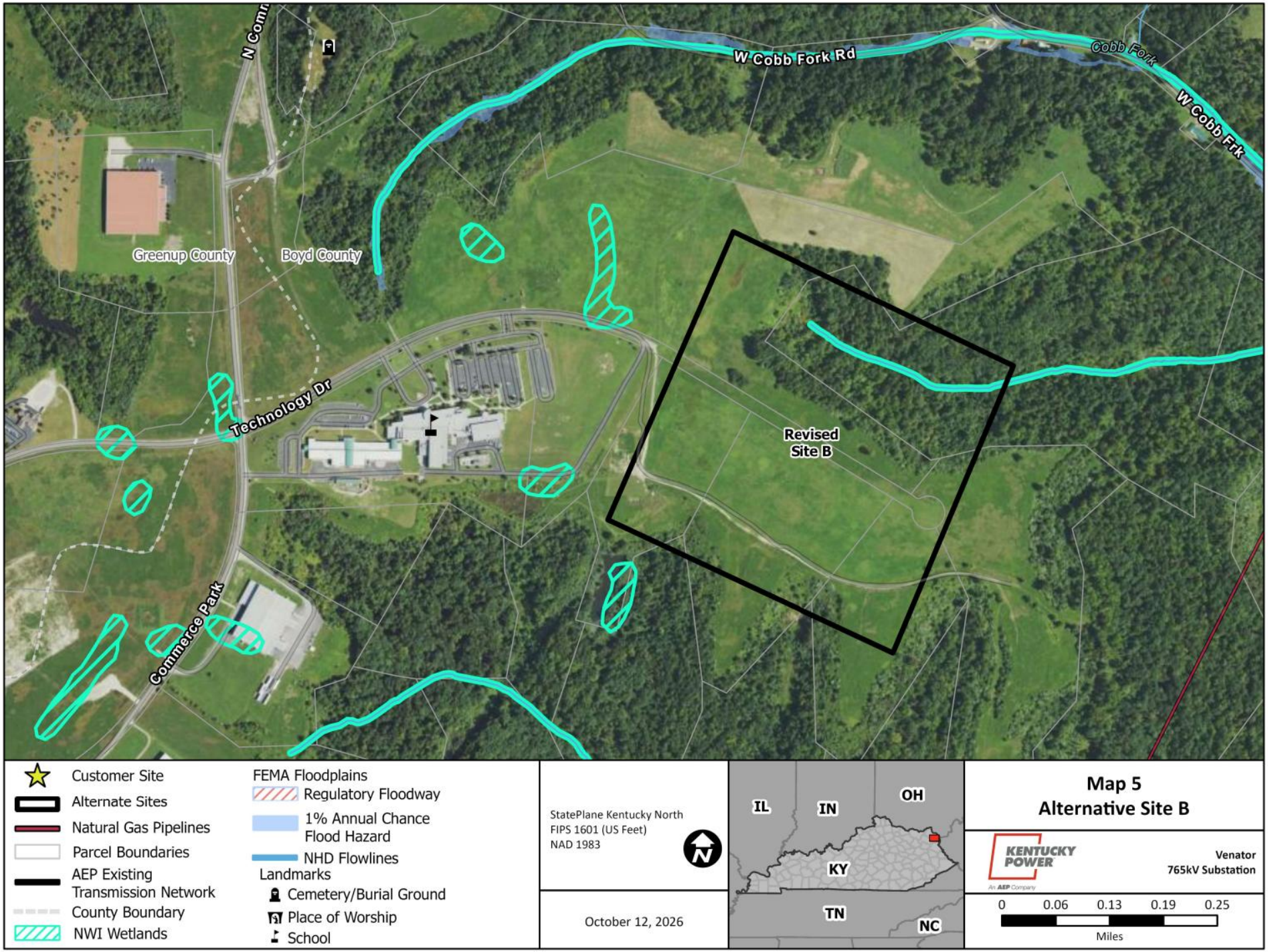
An existing dirt road provides access to Technology Drive. The site is located within an area characterized by industrial and institutional development. Although residences are located on adjacent parcels, no known residences are located within approximately 1,500 feet of the proposed site footprint. The Baker - Hanging Rock 765 kV Transmission Line is located approximately 2 miles from Alternative Site B, and the customer site is less than a mile to the west. Due to available space and terrain constraints at Alternative Site B, the initial grading concept considered a smaller substation footprint of approximately 1,500 feet by 1,500 feet, or approximately 52 acres and shown on Map 5.



Photograph 1. From Technology Drive looking southeast



Photograph 2. From Technology Drive looking south


W Cobb Fork Rd
Cobb Fork
W Cobb Frk
Greenup County
Boyd County
Technology Dr
Revised Site B
Commerce Park
Customer Site
Alternate Sites
Natural Gas Pipelines
Parcel Boundaries
AEP Existing Transmission Network
County Boundary
NWI Wetlands
FEMA Floodplains
Regulatory Floodway
1% Annual Chance Flood Hazard
NHD Flowlines
Landmarks
Cemetery/Burial Ground
Place of Worship
School
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Map 5
Alternative Site B
Venator
765kV Substation
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0.25
Miles

5.3 Alternative Site Comparison

Natural Environment

The natural environment includes water, soil, sensitive species, and wildlife habitat. Potential impacts are based on publicly available maps and data. The FEMA 100-Year Floodplain was also considered during the site identification process, however, none of the Alternative Substation footprints intersect with these features.

Based on data obtained from the National Hydrography Dataset (NHD) and National Wetlands Inventory (NWI), Alternative Site A has two NHD flowlines and two NWI wetlands within a 1,000-foot buffer of the substation footprint. Alternative Site B has one NHD flowline and four NWI wetlands within a 1,000-foot buffer of the substation footprint. A major differentiator between Alternative Sites A and B are potential stream impacts. Alternative Site B would require significant impacts to a stream to accommodate the size of the substation, whereas Alternative Site A is able to avoid impacts to NHD streams. The National Land Cover Database (NLCD) was utilized to evaluate how much tree clearing would be necessary on Alternative Sites A and B. The majority of Alternative Site A is composed of Pasture/Hay, with small patches of forested land to the north and southwest. Alternative Site A was previously used for cattle grazing and currently is open pasture. The majority of Alternative Site B is Pasture/Hay with deciduous and mixed forest along the border of the station footprint.

The Information for Planning and Consultation (IPaC) from the U.S. Fish & Wildlife Service was utilized to determine the presence of Threatened and Endangered Species within the preliminary substation footprints on Alternative Site A and Alternative Site B. The results of the IPaC are shown in **Table 2.**

Table 2: Threatened and Endangered Species

Species	Status	Site
Gray Bat (*Myotis grisescens*)	Endangered	Site A and Site B
Indiana Bat (*Myotis sodalis*)	Endangered	Site A and Site B
Tricolored Bat (*Perimyotis subflavus*)	Proposed Endangered	Site A and Site B
Pink Mucket (*Lampsilis abrupta*)	Endangered	Site A
Salamander Mussel (*Simpsonaias ambigua*)	Proposed Endangered	Site A and Site B
Monarch Butterfly (*Danaus plexippus*)	Proposed Threatened	Site A and Site B

Human Environment

The human environment includes the use of the land and activities at a given location such as agriculture, forestry, residential, industry, mining, commercial, institutional, scenic assets, and recreational uses.

Within the Study Area, the majority of the human environment consists of residential and industrial uses. Both sites have inactive and previously mined areas present, which is common throughout much of the Study Area. Residential areas are concentrated around main roads such as State Route 5, West Cobb Fork, and Angela Drive. However, Alternative Site A and Alternative Site B are located in more industrial and institutional areas. Parcel data shows that Alternative Site A and Alternative Site B are both listed as No Zoning, as Boyd County has no planning or zoning outside incorporated cities, and both Alternative Sites are in unincorporated areas of Boyd County.

There are three cemeteries on the Alternative Site A property, all outside of the substation footprint: one private graveyard just north of the substation footprint, one cemetery southwest of the substation site, and one cemetery northwest of the substation site. There are no cemeteries near the substation footprint on Alternative Site B. There are several natural gas pipelines throughout the Study Area. One pipeline crosses the parcel for Alternative Site A; however the station footprint can be located to avoid any impacts to the pipeline.

Lastly, Kentucky Power representatives contacted the landowners of the Alternative Sites to assess property availability for construction of the proposed substation. The landowner of Alternative Site A indicated a willingness to sell the property, making the site available for acquisition. In contrast the owner of Alternative Site B, indicated that the property is likely to be used for future development.

Engineering

Engineering considerations affect the ability to efficiently and cost effectively engineer, acquire land and rights-of-way (ROWs), construct, operate, and maintain the proposed substation. Major factors include safety, steep topography, access, distance from the 765 kV line, cut/fill, and grading.

The ideal substation layout included a fenced area of approximately 1,600 feet by 1,900 feet, or approximately 70 acres. Following selection of Alternative Sites, the preliminary substation footprints were refined to better accommodate the available buildable area at each site. The footprint for Alternative Site A was adjusted to maximize use of the existing open pastureland and minimize required grading (approximately 45-acre footprint). Based on preliminary grading,

Alternative Site A requires approximately 308,548 cubic yards of cut and 62,182 cubic yards of fill.

Due to available space and terrain constraints at Alternative Site B, the initial grading concept considered a smaller substation footprint of approximately 1,500 feet by 1,500 feet, or approximately 52 acres. Based on preliminary grading, Alternative Site B would require approximately 2,000,000 cubic yards of cut and 1,900,000 cubic yards of fill, representing substantially greater grading requirements than Alternative Site A.

Preliminary conceptual transmission line routes were also developed to support the evaluation of Alternative Sites. Each substation alternative would require two new 765 kV transmission line connections to the existing transmission system. Therefore, proximity to the existing Baker - Hanging Rock 765 kV Transmission Line is an important consideration in minimizing the overall length of new greenfield 765 kV transmission line.

Based on existing constraints in the area, the preliminary 765 kV connections for Alternative Site B would require approximately 2.4 miles and 3.15 miles of new transmission line, respectively, with the two connections crossing State Route 5 at separate locations. Conversely, the two parallel 345 kV transmission lines connecting Alternative Site B to the customer site would each be approximately 0.5 miles long.

Alternative Site A is located closest to the existing Baker - Hanging Rock 765 kV Transmission Line and would require shorter 765 kV transmission line connections, totaling less than approximately 2.5 miles for both connections. However, Alternative Site A would require longer 345 kV connections to the customer site. The preliminary 345 kV routes would each be approximately 3 miles long and would parallel one another for their entire length. Shorter 765 kV connections at Alternative Site A outweigh its longer 345 kV connections, due to the increased ROW widths, structure sizes, and costs of 765 kV construction versus 345 kV construction. Further, the two 345 kV lines can be parallel each other over State Route 5 and Williams Creek.

6.0 PROPOSED SUBSTATION SITE

The Siting Team recommends Alternative Site A as the Proposed Substation Site because it best addresses the siting goals outlined in Section 1.3 (Map 6). Alternative Site A provides relatively flat, open terrain with substantially lower anticipated grading and clearing requirements than Alternative Site B. It is located closest to the existing Baker - Hanging Rock 765 kV Transmission Line, thereby minimizing the length of new 765 kV transmission line required to connect the proposed substation to the existing transmission system. Although Alternative Site A would require longer 345 kV connections to the customer site, the site provides direct access from Virginia Boulevard and sufficient acreage to accommodate the proposed substation while

avoiding the FEMA-mapped floodplain, NHD- and NWI-mapped streams and wetlands, known cemeteries, and the existing natural gas pipeline. The preliminary substation footprint can be accommodated on a single parcel, and the property owner was willing to sell the property and subsequently signed an option, allowing Kentucky Power to purchase the approximately 316 acres to build the substation. In comparison, Alternative Site B would require substantially greater grading, over two acres of tree clearing, longer connections to the existing 765 kV transmission line, and acquisition of property identified for future development.

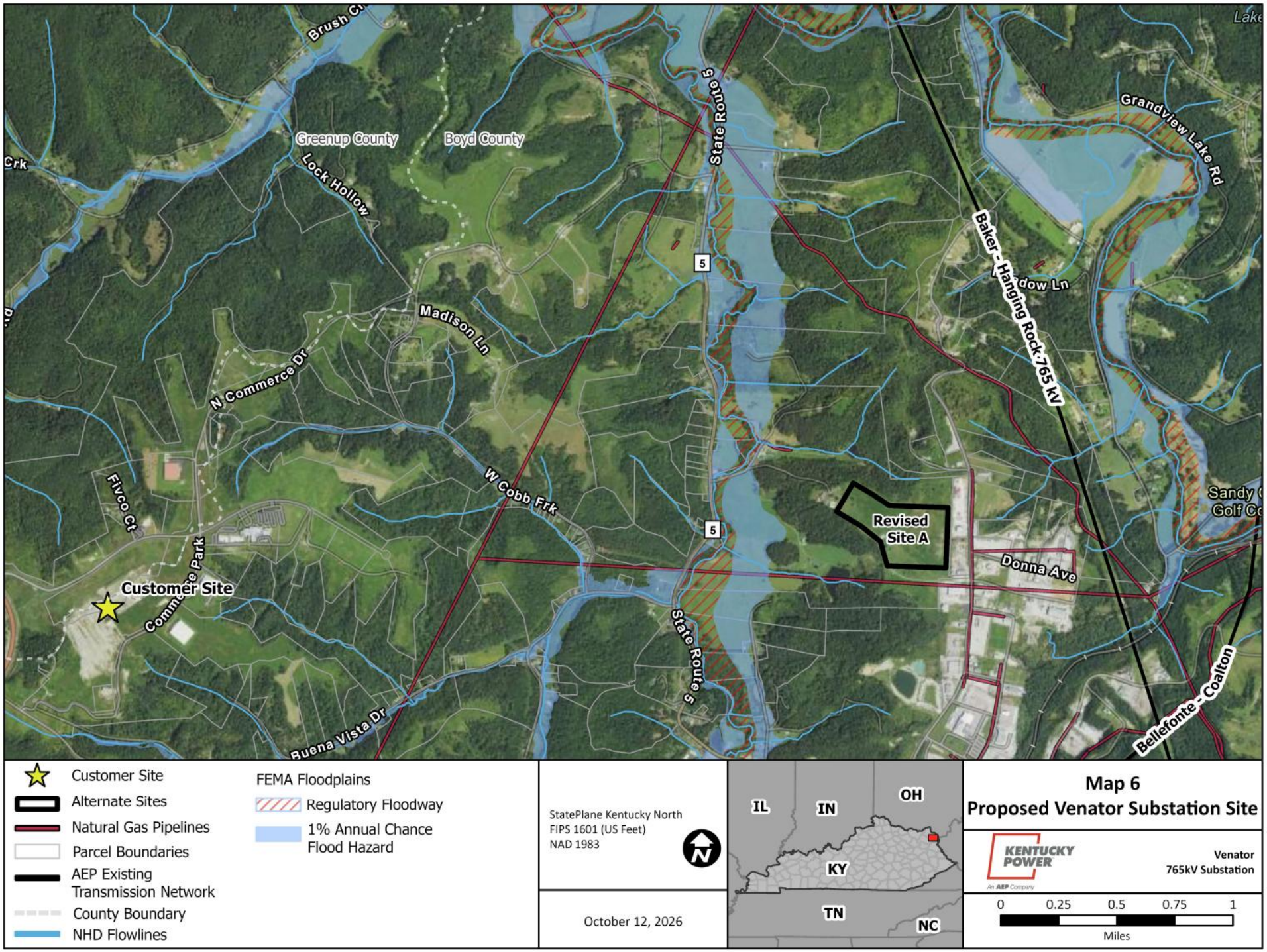
Collectively, the Siting Team believes the Proposed Substation Site A meets the overall goals of the Project and represents a balance between impacts on the natural and human environments while meeting the operational needs of the Project in an effective manner.

Prior to obtaining the option to purchase the parcel, several studies were conducted to further vet the Proposed Substation Site and included:

- Geotechnical borings
- Wetland delineation
- T&E habitat assessment
- Phase I Cultural Resources Survey

Additional studies may be required prior to full property acquisition.

The results of these studies did not identify any fatal flaws with regard to environmental permitting that would preclude use of the property for the proposed substation. The wetland delineation indicated that features potentially under U.S. Army Corps of Engineers jurisdiction can be avoided by the substation footprint and grading.


Brush Cr
Greenup County
Boyd County
Lock Hollow
State Route 5
Grandview Lake Rd
Baker - Hanging Rock 765 kV
Madison Ln
N Commerce Dr
Fivco Ct
W Cobb Frk
Revised Site A
Donna Ave
Customer Site
Commerce Park
Buena Vista Dr
Belleforte - Coalton
Customer Site
Alternate Sites
Natural Gas Pipelines
Parcel Boundaries
AEP Existing Transmission Network
County Boundary
NHD Flowlines
FEMA Floodplains
Regulatory Floodway
1% Annual Chance Flood Hazard
StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983
October 12, 2026
IL
IN
OH
KY
TN
NC
Map 6
Proposed Venator Substation Site
KENTUCKY POWER
An AEP Company
Venator
765kV Substation
0
0.25
0.5
0.75
1
Miles

Attachment A. Preliminary Venator Substation Layout

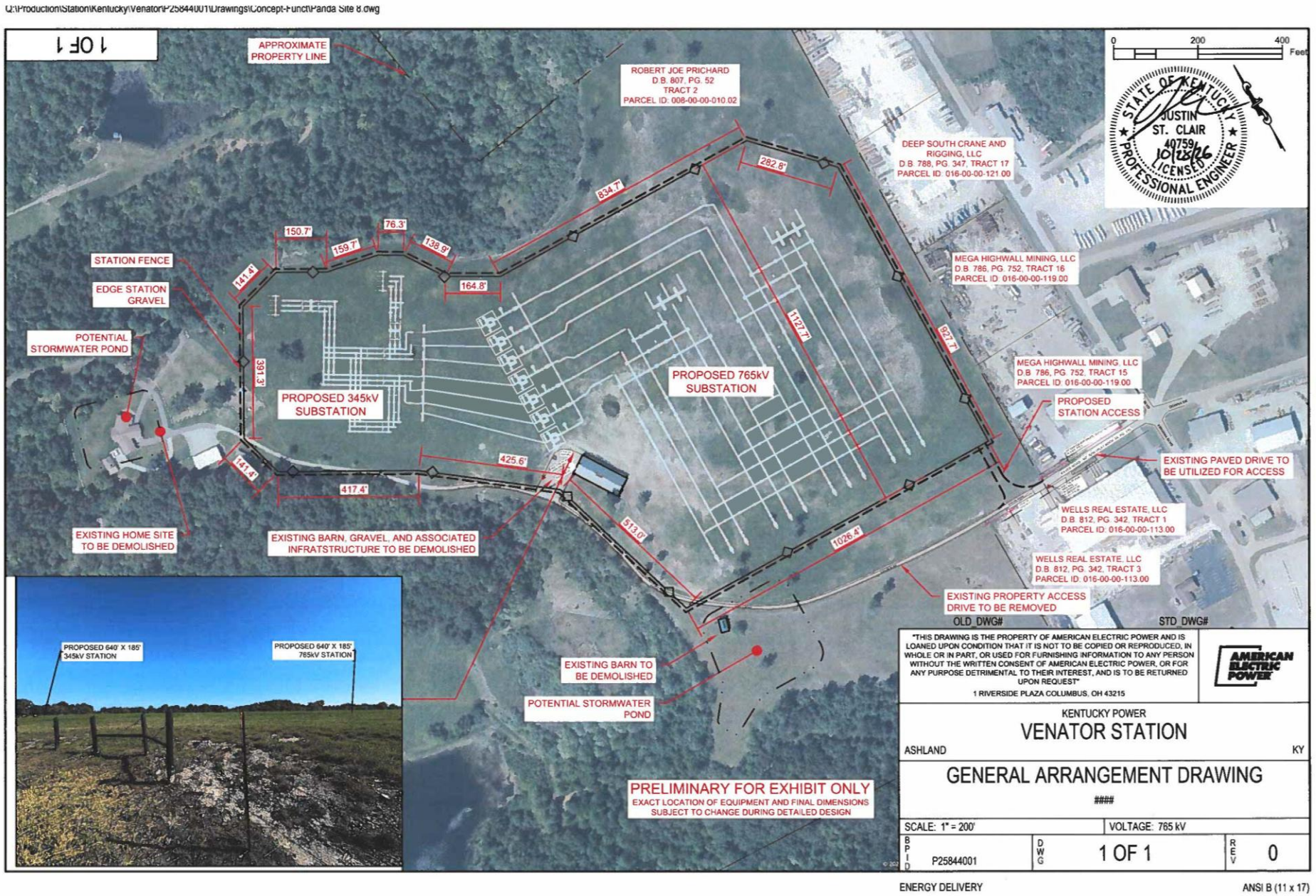


Exhibit ESL-2

Venator Substation Location Map

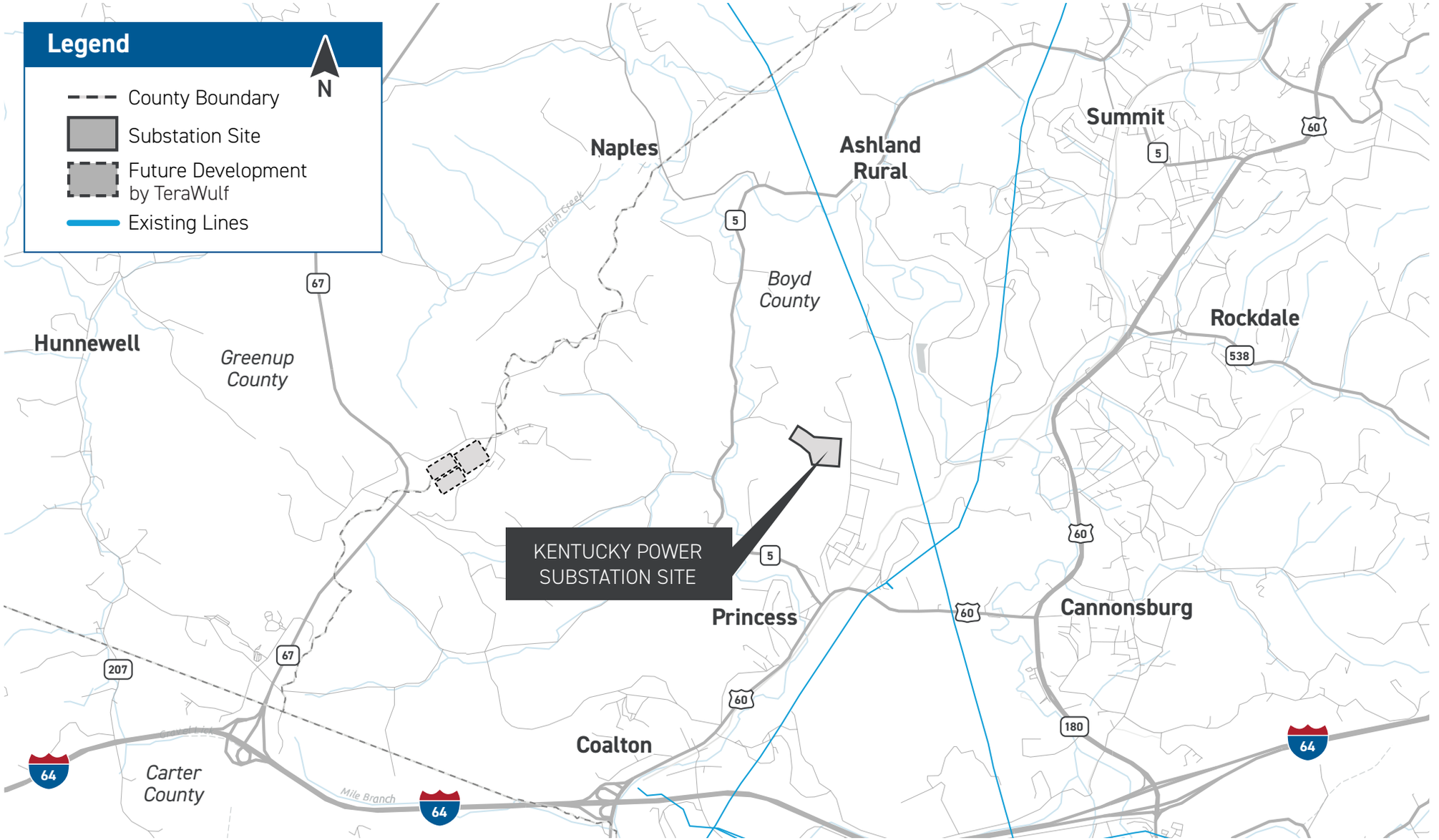
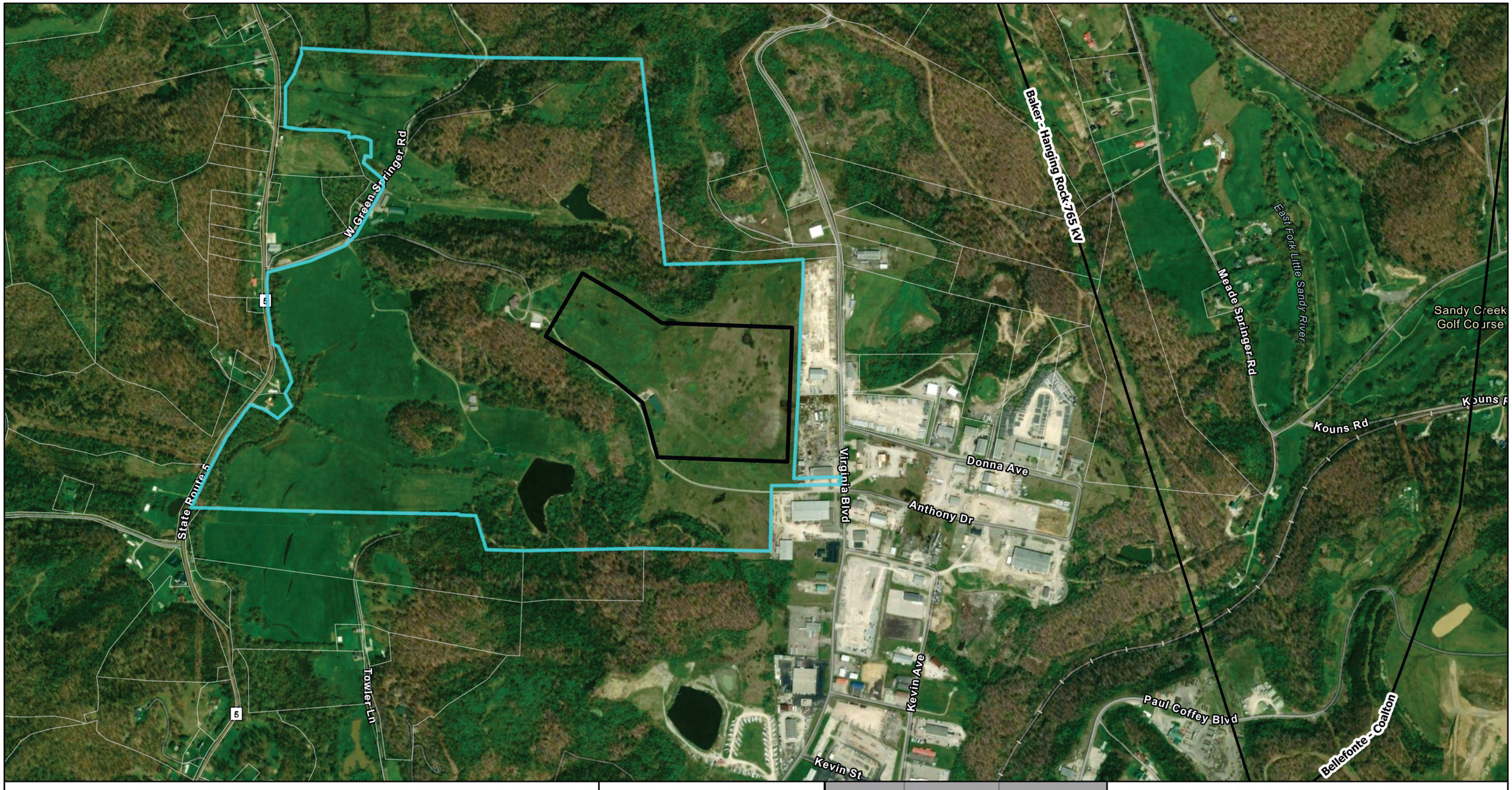

Legend
N
County Boundary
Substation Site
Future Development by TeraWulf
Existing Lines
Naples
Ashland Rural
Summit
Boyd County
Rockdale
Hunnewell
Greenup County
KENTUCKY POWER SUBSTATION SITE
Princess
Cannonsburg
Coalton
Carter County
Brush Creek
Mile Branch
67
5
60
538
207
180
64

Exhibit ESL-3

Venator Substation Overlay



Venator 765 kV Substation Footprint

Kentucky Power Substation Parcel – Under Option

Parcel Boundaries

AEP Existing Transmission Network

StatePlane Kentucky North
FIPS 1601 (US Feet)
NAD 1983

October 14, 2026



Venator 765 kV Substation Project

KENTUCKY POWER
An AEP Company

Venator
765kV Substation

0 250 500 750 1,000
Feet

1" = 1,000 ft.

Exhibit ESL-4

AEP Muskie-Venator Outreach

KENTUCKY POWER
An AEP Company



Muskie Transmission Improvements Project

Join Us For a Project Open House

October 15, 2026 · 5:30 - 7:30 p.m.
Boyd Convention and Arts Center
15605 KY-180, Catlettsburg, KY 41129

Project Information

You are receiving this postcard because you own property or live in the area where Kentucky Power representatives plan to upgrade the electric transmission system in western Boyd County. We would like to invite you to an in-person open house to learn more about the Muskie Transmission Improvements Project.

To serve TeraWulf's Muskie Data Center Campus, Kentucky Power representatives propose building two 765-kilovolt (kV) transmission lines totaling approximately 2.5 miles, two parallel 345-kV transmission lines totaling approximately 6 miles long, and a 765-kV substation. The new 765-kV lines would connect the proposed Venator substation to the existing 765-kV line. The two 345-kV lines would connect the new 765-kV substation to TeraWulf's substation to provide reliable electric service.

Learn More and Share Your Input

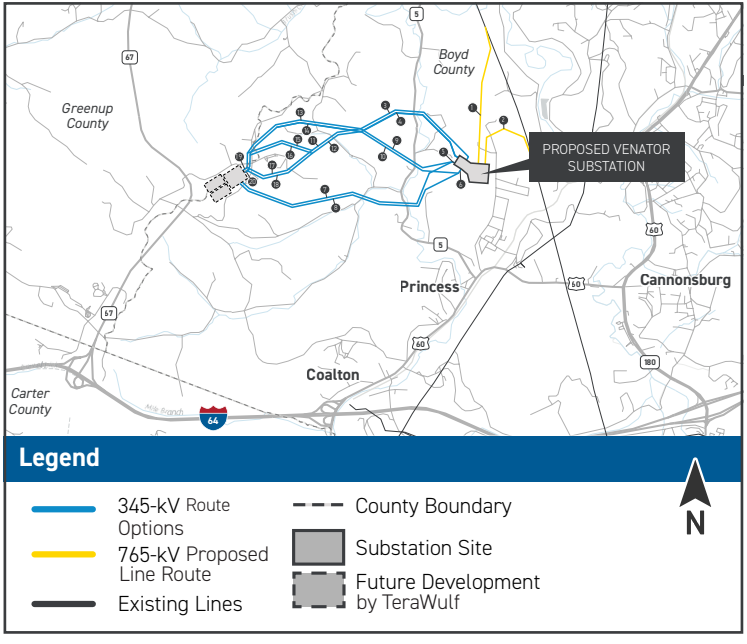
We invite you to learn more and share your input in the ways listed below. Please share your feedback by **October 29.** Our team plans to review your input to minimize impacts on the community and environment.

Packet in the mail: You will receive a packet in the mail with additional information and a comment card. Please return the comment card by October 29.

Project website: Please visit to access project information, view an interactive map, and submit comments: **KentuckyPower.com/Muskie**

In-Person open house: The open house provides community members an opportunity to meet the project representatives and view more detailed substation renderings. **There is no formal presentation, so visitors may come to the meeting at any time.**

Contact us: Connect@KentuckyPowerMuskie.com, 859-334-0649



We value your input. Please send comments and questions to:
Connect@KentuckyPowerMuskie.com • 859-334-0649
KentuckyPower.com/Muskie

KENTUCKY POWER
An AEP Company
PO BOX 2021
Roanoke, VA 24022-2121

Muskie Transmission Improvements Project

KENTUCKY POWER
An AEP Company

Follow-up questions and comments

Please fill out and mail this comment card using the enclosed self-addressed, stamped envelope by October 29. If you prefer to provide comments online, visit KentuckyPower.com/Muskie and click the "Contact Us" button.

Please provide your name and contact information below to ensure we have the most up-to-date information for our records.

Name: _____ Date: _____

Address: _____

City: _____ State: _____ ZIP: _____

Email: _____ Phone: _____

Please complete this questionnaire after you have reviewed the information provided about this project.

Did you find the content provided to be informative? ☐ Yes ☐ No

If no, please explain

_____

_____

Please include below any information about features on your property that are in the project area. If you prefer that a project team member contact you to discuss any of your comments, please note in the additional comments below.

Example: "Study Segment 3 is on the west side of my property and there is an existing gas line running parallel to this study segment."

☐ House, shed or other structure

_____

_____

_____

☐ Springs, streams, wetlands, sensitive species or protected areas

_____

_____

KENTUCKY POWER
An AEP Company

☐ Cave, sinkhole, mine or portal

☐ Approved or documented planned project

☐ Existing conservation easement

☐ Historical or archaeological feature (i.e. homestead, Native American site)

☐ Underground utilities or pipelines (including gas, water, oil, etc.)

☐ Agricultural features including irrigation systems, drainage tiles, etc.

☐ Other land use such as private airstrips, past landfills or buried waste, radio or cellular towers

☐ Additional Comments

PO BOX 2021
Roanoke, VA 24022-212

Oct. 2, 2026

IMPORTANT INFORMATION ABOUT YOUR PROPERTY
«Full Name»
«Mailing Address»
«City», «State» «Zip Code»

Subject: Join Us at an Open House for the Muskie Transmission Improvements Project

Dear Neighbor,

You are receiving this letter because you own property or live in the area where Kentucky Power Company representatives plan to upgrade the local power grid. We would like to invite you to an in-person open house to learn more about the Muskie Transmission Improvements Project, which will provide service to TeraWulf's data center campus in EastPark Industrial Park.

The Muskie Transmission Improvements Project involves building:

- The Venator 765-kilovolt(kV) substation
- Two 765-kilovolt (kV) transmission lines totaling approximately 2.5 miles to connect the proposed substation to an existing line
- Two approximately 3-mile-long 345-kV transmission lines parallel to each other, totaling 6 miles

The new 765-kV lines would connect the Venator substation to an existing 765-kV line. The two 345-kV lines would connect the proposed substation to TeraWulf's campus to provide reliable electric service. Kentucky Power representatives are evaluating potential transmission line routes within the project area.

While the open house is not required as part of the Kentucky Public Service Commission application process, gathering input early allows the project team to consider local information and potential property impacts as routes are evaluated.

The Kentucky Public Service Commission (PSC) requires Kentucky Power representatives to file an application before beginning construction. As part of its review, the PSC will provide opportunities for public comment and hearings.

Kentucky Power officials plan to file an application for the proposed Venator Substation in October 2026 and anticipate a decision in February 2027. Kentucky Power officials plan to file an application for the transmission line in January 2027 and anticipate a PSC decision in April 2027.

We invite you to learn more about the project in the following ways:

IN-PERSON OPEN HOUSE:
We invite you to attend a "come-and-go" open house on **Thursday, October 15, from 5:30 to 7:30 p.m. at the Boyd Convention and Arts Center, 15605 KY-180, Catlettsburg, KY 41129.**

Visitors can view detailed maps and talk with team members about the proposed study segments. There is no formal presentation and you can arrive at any time during the event.

We invite you to share your input on the proposed study segments at our in-person open house. Your feedback can help project team members evaluate potential routes for the new transmission line.

MATERIALS ENCLOSED WITH THIS LETTER:
Review the enclosed fact sheet for additional project information and complete the enclosed comment form. Please mail the comment form to us in the enclosed self-addressed, stamped envelope by October 29, 2026.

PROJECT WEBSITE WITH VIRTUAL OPEN HOUSE:
Please visit **KentuckyPower.com/Muskie** to access project information, view an interactive map and enter our virtual open house.

ALTERNATE WAYS TO PROVIDE INPUT OR CONTACT THE PROJECT TEAM:

- Call 859-334-0649 to leave a message with your feedback or questions for the project team.
- Email your input or questions to connect@kentuckypowermuskie.com
- Review the enclosed fact sheet and complete the enclosed property information comment form and mail it back to us in the envelope provided.
- Submit comments to the project team through the interactive map on the project website.

When sharing your input, you can include information about your property, such as:

- Historically significant buildings or landmarks
- Natural features such as wetlands or springs
- Future plans for your property

Please share your input by October 29, 2026. Your local knowledge can help project team members identify a suitable route for the proposed transmission lines. Visit **KentuckyPower.com/Muskie**, email us at **connect@kentuckypowermuskie.com**, or call **859-334-0649** to learn more and get involved.

Sincerely,

Amanda S. DeHaven
Project Outreach Specialist, Senior

Questions or Comments?

Please fill out this panel, tear it off, and mail it back to us.

Please provide your name and contact information to ensure our records are up to date.

Name: _____

Email: _____

Phone: _____

Please provide feedback about your property after you review the project details and the potential routes under consideration. An interactive map is available at **KentuckyPower.com/Muskie**

Feedback example: "There is a family cemetery located along Route Option 150 approximately 100 feet west of 345 Broad Street."

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

We value your input about this project. You may provide comments by hovering over this QR code with your smartphone camera and clicking on the webpage that appears.

Important Information About Your Property

Property Owner Name
Address
City, State, Zip

KENTUCKY POWER
An AEP Company
PO Box 2021
Roanoke, VA 24022-2121

KENTUCKY POWER
An AEP Company



Muskie Transmission Improvements Project

Kentucky Power is planning to upgrade the power grid and support economic development opportunities by making significant upgrades to the electric transmission system in Boyd County.

Important Message About Your Property

Dear Neighbor,

You recently received an invitation to attend an open house regarding Kentucky Power's Muskie Transmission Improvements Project. We are writing again to request feedback on possible route options to help our team determine a power line route.

The Muskie Transmission Improvements Project involves building:

- The 765-kilovolt (kV) Venator Substation
- Two 765-kV transmission lines totaling approximately 2.5 miles to connect the proposed Venator Substation to an existing line
- Two 345-kV transmission lines, approximately 3 miles long, parallel to each other, totaling 6 miles

We invite you to share your input on the proposed study segments by **October 29, 2026.** Please share your input by mailing the attached comment card to Kentucky Power, visiting **KentuckyPower.com/Muskie**, emailing Connect@KentuckyPowerMuskie.com or calling 859-334-0649.

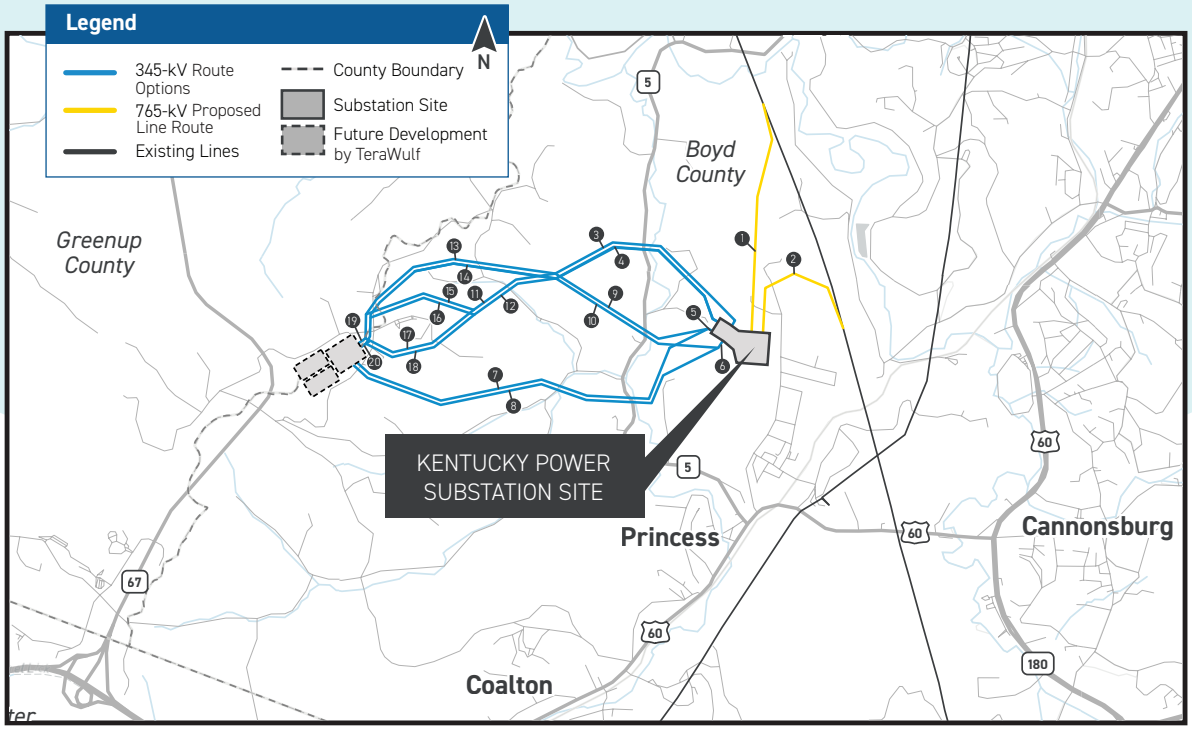
What Happens Next

Kentucky Power will determine the proposed routes for the new transmission lines after receiving public input on the proposed study segments and completing additional route analysis.

To learn more about the project, enter a virtual open house, review an interactive map and submit comments, visit **KentuckyPower.com/Muskie.**

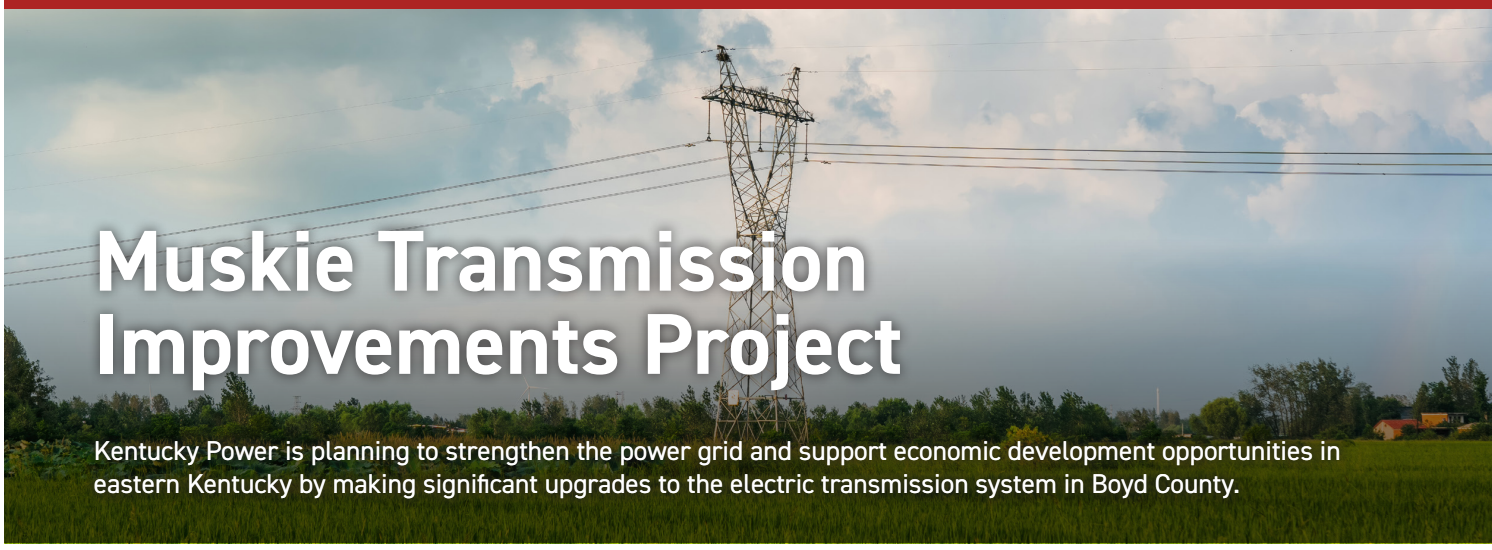
Sincerely,

Amanda S. DeHaven
Project Outreach Specialist, Senior



KENTUCKY POWER
An AEP Company
PO Box 2021
Roanoke, VA 24022-2121

KENTUCKY POWER
An AEP Company



Muskie Transmission Improvements Project

Kentucky Power is planning to strengthen the power grid and support economic development opportunities in eastern Kentucky by making significant upgrades to the electric transmission system in Boyd County.

What

The project involves building:

- The 765-kilovolt (kV) Venator Substation
- Two 765-kV transmission lines totaling approximately 2.5 miles to connect the proposed Venator Substation to an existing line
- Two 345-kV transmission lines, approximately 3 miles long, parallel to each other, totaling 6 miles

The proposed routes for the new transmission lines will be determined after public input is received on the preliminary route options and additional route analysis is completed.

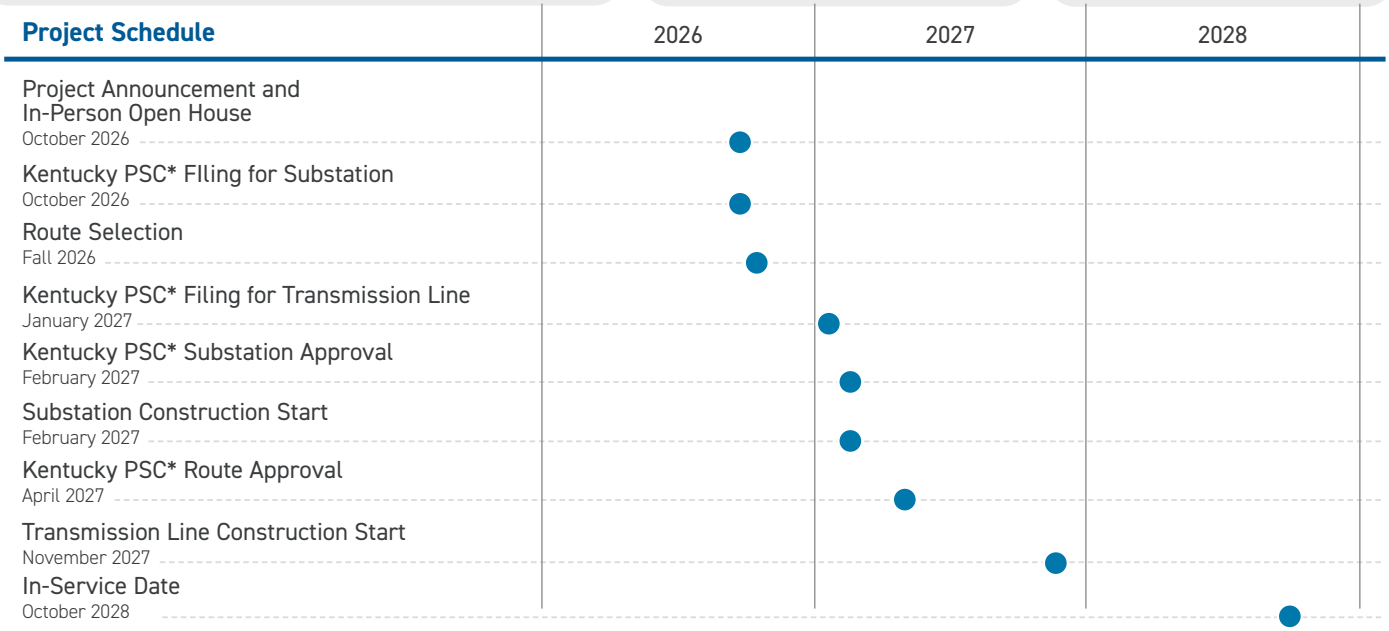
Why

TeraWulf needs a reliable power source for its planned data center campus in EastPark Industrial Park. The new transmission lines and substation will provide the electrical infrastructure needed to serve the facility and support continued economic development opportunities in the region.

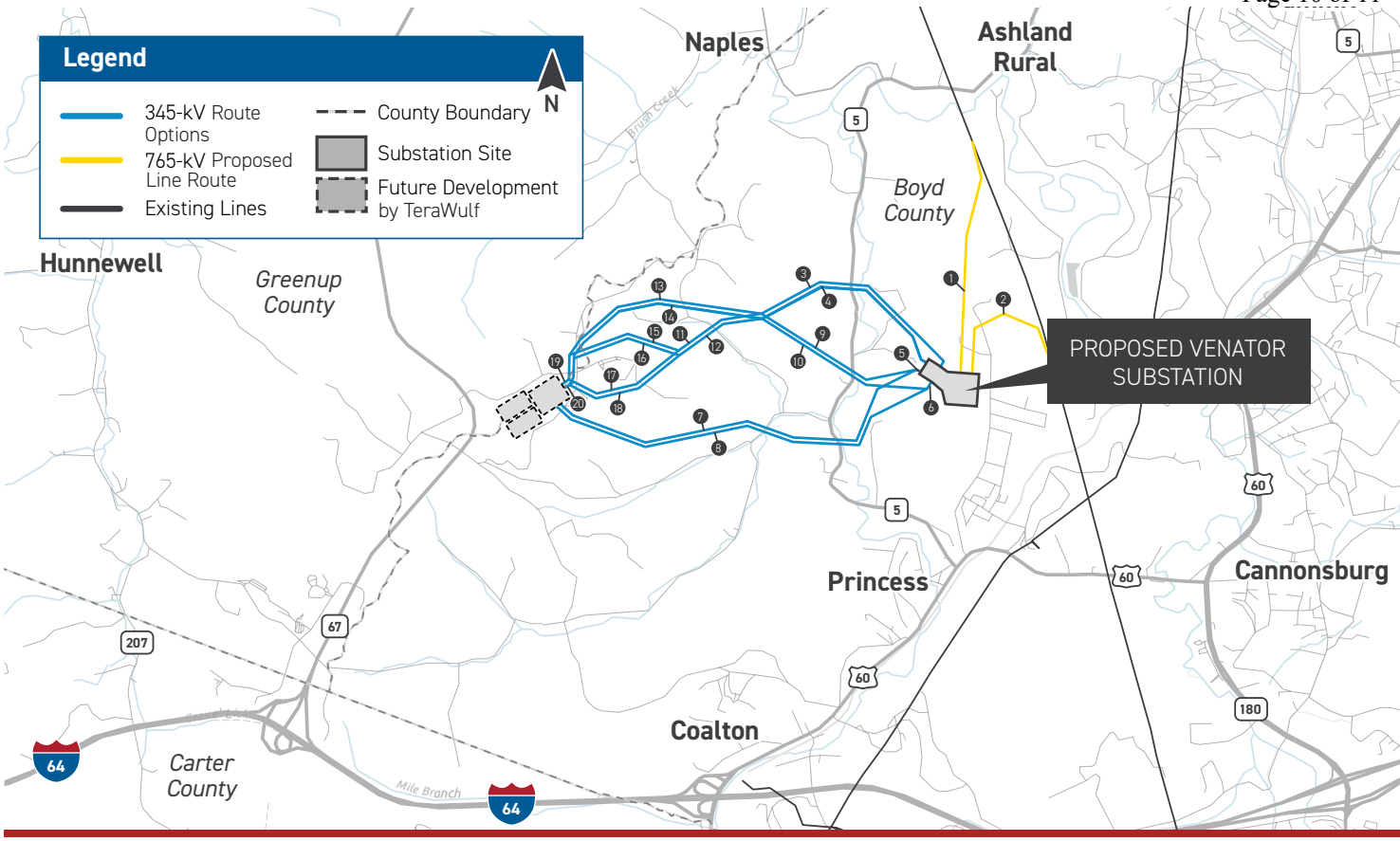
Where

The project is located in western Boyd County. The two proposed 765-kV transmission lines will connect the new substation to the existing 765-kV transmission line. The two 345-kV transmission lines will extend from the new substation to TeraWulf's facility in the industrial park.

Project Schedule

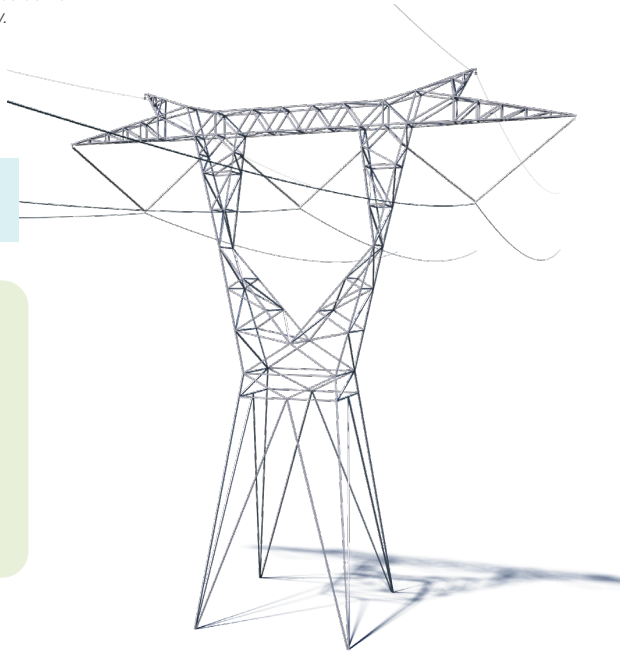


** Kentucky Public Service Commission Timeline Subject to Change*



*Potential 345-kV routes presented to determine a line route. Company representatives do not build all route options. One route will be built based on public feedback and feasibility.

Typical Structures



765-kV Self-Supporting Lattice Structure	345-kV Self-Supporting Lattice Structure
Typical Structure Height: 140-180 feet	**Typical Structure Height:** 100-120 feet
Typical Right-of-Way Width: 150-300 feet	**Typical Right-of-Way Width:** 150-200 feet
Typical Distance Between Structures: 1,200 feet	**Typical Distance Between Structures:** 1,000 feet

*Exact structure, heights and right-of-way requirements will vary.

We value your input. Please send comments and questions to:
Connect@KentuckyPowerMuskie.com • 859-334-0649

KentuckyPower.com/Muskie

10/01/2026

Muskie Transmission Improvements Project

Automated Customer Calling Report (DAVOX)

Landowners in the project area were notified via phone of the open house on 10/12/2026.

Customers called	141
Customers contacted	101
Contact rate	72%

Name	Total Contacts	Answering Machine	Answer	No Answer	Do Not Call	Error	Cancelled	Ready	Other
BoydCountyKY_MuskiePanda_OpenHouseInvite_10122026	141	50 (35.46%)	44 (31.21%)	1 (0.71%)	0 (0%)	41 (29.08%)	0 (0%)	0 (0%)	Dropped: 1 (0.71%), RemoteRelease: 2 (1.42%), Fax Detected: 1 (0.71%), Silence: 1 (0.71%),
errorBoydCountyKY_MuskiePanda_OpenHouseInvite_10122026	41	5 (12.2%)	2 (4.88%)	0 (0%)	0 (0%)	30 (73.17%)	0 (0%)	0 (0%)	SIT Invalid Num: 1 (2.44%), Dropped: 1 (2.44%), RemoteRelease: 2 (4.88%),

Exhibit ESL-5

AEP Muskie-Venator News Release

MEDIA CONTACT:

Sarah Lynch
Corporate Communications
Cell: 606-254-9095
smlynch@aep.com; www.kentuckypower.com

FOR IMMEDIATE RELEASE

KENTUCKY POWER PLANS MUSKIE TRANSMISSION IMPROVEMENTS IN BOYD COUNTY

BOYD COUNTY, Ky., Oct. 2, 2026 – Kentucky Power plans electric transmission improvements in Boyd County to provide service to the Muskie Data Center Campus at the EastPark Industrial Park and support continued economic development in the area. Company representatives are hosting an open house to share information about the proposed improvements, discuss potential transmission line routes and gather feedback from landowners and community members.

The Muskie Transmission Improvements Project involves building:

- The 765-kilovolt (kV) Venator Substation
- Two 765-kV transmission lines totaling approximately 2.5 miles to connect to the proposed substation to an existing line
- Two approximately 3-mile-long 345-kV transmission lines parallel to each other, totaling 6 miles

Kentucky Power representatives are evaluating potential transmission line routes within the project area in western Boyd County. Proposed line routes have not been selected and will be determined after community input is received and additional route analysis is completed.

The open house provides landowners and community members an opportunity to review proposed study segments, speak directly with **transmission project team members**, ask questions and provide information that may help determine route development.

Thursday, Oct. 15, 2026, from 5:30 p.m. to 7:30 p.m.
Boyd Convention and Arts Center
15605 KY-180, Catlettsburg, KY 41129

Attendees may arrive at any time during the event to review project information, ask questions and provide feedback to the transmission team. No formal presentation is scheduled. Area landowners will receive a packet in the mail containing additional project details and a comment card that can be returned with their feedback.

Landowner and community feedback will be considered along with engineering, environmental and other factors as the project team evaluates potential routes. Feedback is requested by **Thursday, Oct. 29**.

While the open house is not required as part of the Kentucky Public Service Commission application process, gathering input early allows the project team to consider local information and potential property impacts as routes are evaluated. The Kentucky Public Service Commission (PSC) requires Kentucky Power representatives to file an application before beginning construction. As part of its review, the PSC will provide opportunities for public comment and hearings. Kentucky Power officials plan to file an application for the substation portion of the project this October and the transmission line portion in early 2027 and anticipate a PSC decision in spring 2027.

If the project receives approval, construction on the substation is expected to begin in early 2027. The transmission line construction is expected to begin in November 2027. The new facilities are expected to be placed in service in October 2028. This schedule is subject to change.

Kentucky Power, headquartered in Ashland, provides electric service to approximately 162,000 customers in all or part of 20 eastern Kentucky counties, including Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike and Rowan.

###

The Independent

226 Seventeenth Street
Post Office Box 311
Ashland, Kentucky 41105-0311
606-326-2600 • 1-800-955-5860
www.dailyindependent.com

BURNS & MCDONNELL
5521 RESEARCH PARK DRIVE
CATONSVILLE MD 21228

NEWSPAPER AFFIDAVIT

I, LEANNA HANKINS, EDITORIAL CLERK OF THE DAILY INDEPENDENT NEWSPAPER PUBLISHED IN ASHLAND, AND HAVING THE LARGEST CIRCULATION OF ANY NEWSPAPER IN THE BOYD COUNTY, KENTUCKY, DO HEREBY CERTIFY THAT FROM MY OWN KNOWLEDGE AND A CHECK OF THE FILES OF THIS NEWSPAPER THAT THE FOLLOWING ADVERTISEMENT WAS INSERTED IN THE DAILY INDEPENDENT.

SIGNATURE: Leanna Hankins

SUBSCRIBED AND SWORN TO BEFORE ME BY THE ABOVE, THIS 12th DAY OF October, 2026

NOTARY PUBLIC Ashley M Fletcher

Ashley M. Fletcher
Notary Public, Commonwealth of Kentucky
Commission # KYNP88450
Expiration date. 5/15/2028

MY COMMISSION EXPIRES _____

COMMENTS	EXPIRED DATE	AD CAPTION	#TIMES	AMOUNT
THE DAILY INDEPE 10/10/2026		NEW TRANSMISSIO	1	792.00

10/10/2026

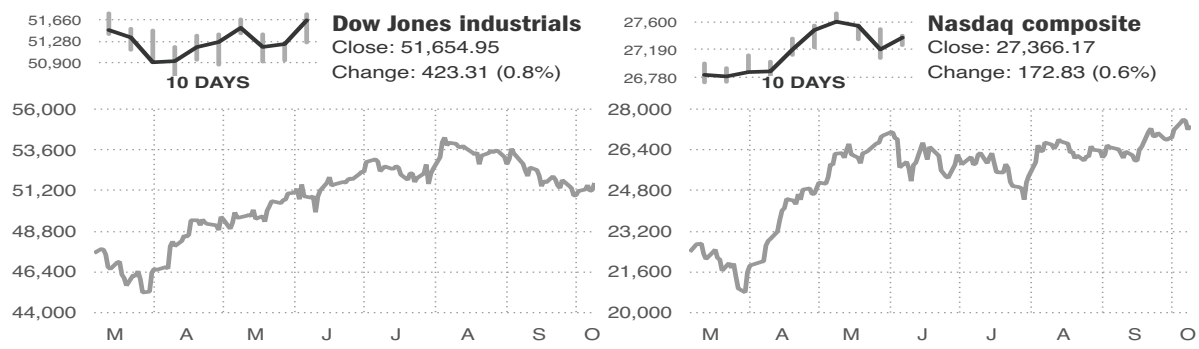
DOW 51,654.95
423.31 0.83%

NASDAQ 27,366.17
172.83 0.64%

S&P 500 7,811.54
46.18 0.60%

GOLD 4,191.40
59.60 1.44%

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ARE YOU PAYING TOO MUCH FOR YOUR MEDICARE SUPPLEMENT?
ACCORDING TO A NEW LAW, YOU MAY
SAVE UP TO 50%
on premium with the same benefits!
GUARANTEED ISSUE!!!
NO HEALTH QUESTIONS
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606.683.2104 or 859.948.4376
HOURS AT ALL LOCATIONS: 10AM-4PM
SOPER'S DRUGS
227 W. Main Street, Carlisle, KY
OCTOBER 6TH, 20TH & 27TH
MEDSAVE GRAYSON
601 N. Carol Malone Blvd., Grayson, KY
OCTOBER 12TH, 19TH & 26TH
ROSS DRUGS
125 Foxglove Dr #1, Mt. Sterling
MEDSAVE OLIVE HILL
136 Jessica Lane, Olive Hill, KY
OCTOBER 2ND, 9TH, 15TH, 16TH



StocksRecap

	NYSE	NASD
Vol. (in mil.)	4237	2695
Pvs. Volume	5441	4071
Advanced	1465	1729
Declined	1144	1602
New Highs	39	112
New Lows	64	293

	HIGH	LOW	CLOSE	CHG	%CHG	WK	MO	QTR	YTD
DOW	51,765.11	51,258.95	51,654.95	+423.31	+0.83%	▲	▲	▲	+7.47%
DOW Trans.	19,861.87	19,704.46	19,804.14	-4.93	-0.03%	▼	▲	▲	+14.10%
DOW Util.	1,057.24	1,046.28	1,055.96	+8.09	+0.77%	▲	▲	▲	-1.13%
NYSE Comp.	23,953.60	23,797.60	23,939.10	+141.50	+0.60%	▲	▲	▲	+8.79%
NASDAQ	27,395.40	27,256.14	27,366.17	+172.83	+0.64%	▲	▲	▲	+17.74%
S&P 500	7,820.57	7,779.34	7,811.54	+46.18	+0.60%	▲	▲	▲	+14.11%
S&P 400	3,677.97	3,644.88	3,669.17	+19.15	+0.53%	▲	▲	▲	+11.01%
DOW Total	76,995.00	76,558.33	76,901.75	+470.41	+0.62%	▲	▲	▲	+13.93%
Russell 2000	2,814.01	2,795.59	2,806.98	+12.85	+0.46%	▼	▲	▲	+13.10%

LocalStocks

NAME	TICKER	CLOSE	WK	HI	LO
Cintas Corp.	CTAS	202.41	▲	219.16	161.16
City Holding	CHCO	139.97	▼	148.99	113.21
Cleveland-Cliffs Inc.	CLF	12.98	▲	16.70	7.73
Community Trust Bancorp	CTBI	74.16	▼	79.92	50.25
Humana Inc.	HUM	431.87	▲	456.50	163.11
Kroger Co., The	KR	61.64	▲	76.58	54.15
Marathon Petroleum Corp.	MPC	455.03	▲	470.00	161.93
Texas Roadhouse	TXRH	161.50	▲	216.30	153.82
Yum! Brands, Inc.	YUM	144.82	▲	170.14	134.26

Interestrates

The yield on the 10-year Treasury note rose to 5.24%. Yields affect interest rates on mortgages and other consumer loans.

	PRIME RATE	FED FUNDS
YEST	7.00	3.88
6 MO AGO	6.75	3.63
1 YR AGO	6.75	3.63

TREASURIES	LAST	PVS	NET CHG	WK	MO	QTR	1YR AGO
3-month T-bill	4.16	4.15	+0.01	▲	▲	▲	3.6
6-month T-bill	4.33	4.31	+0.02	▲	▲	▲	3.7
1-year T-bill	4.47	4.44	+0.03	▲	▲	▲	3.7
2-year T-note	4.79	4.76	+0.04	▼	▲	▲	3.8
5-year T-note	5.02	4.99	+0.03	▼	▲	▲	3.9
10-year T-note	5.24	5.23	+0.01	▼	▲	▲	4.3
30-year T-bond	5.60	5.61	-0.01	▼	▲	▲	4.9

CONSUMER RATES	NAT'L AVG	WK AGO	6MO AGO	1YR AGO
72 month new car loan	5.74 –	5.74	6.17	6.3
Money Market Account	0.44 ▼	0.45	0.42	0.4
1 year cd	2.08 ▲	2.06	1.88	1.9
$30K Home equity loan	7.32 ▼	7.33	7.05	8.1
30 year fixed mortgage	7.45 ▲	7.25	6.46	6.3
15 year fixed mortgage	6.81 ▲	6.67	5.84	5.7

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*APY=Annual Percentage Yield. APY is an annualized rate that reflects estimated earnings based on dividend rate and frequency of compounding. Rates subject to change. Minimum balance required to open account & earn stated APY is $35,000/Jumbo. A penalty may be charged for early withdrawal. Yields are compounded monthly. APY is current as of October 1, 2026. Fees may reduce earnings. Membership required. Federally insured by NCUA.

Proposed New Transmission Line
MUSKIE TRANSMISSION IMPROVEMENTS PROJECT
Kentucky Power will host an open house regarding the construction of a new transmission line in western Boyd County.
October 15, 2026
5:30 P.M. – 7:30 P.M.
Boyd Convention and Arts Center
15605 KY-180, Catlettsburg, KY 41129
Kentucky Power representatives will be available to answer questions and receive comments. There will be no formal presentation. Attendees can arrive at any time during the event and are encouraged to ask questions.
The event is free and open to the public.
For more information, please contact:
Connect@KentuckyPowerMuskie.com
859-334-0649
KentuckyPower.com/Muskie
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King's Daughters
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When breast cancer is found early, the chance of survival is 98%. Screening mammograms are an excellent way to detect abnormalities early – before they can be felt! For women at average risk, screening mammography should begin at age 40 and continue annually. Women with a family history may be high risk for breast cancer and should discuss this with their provider.
UK King's Daughters offers 3D mammography, which has been clinically shown to improve invasive cancer detection rates. These images allow the radiologist to view each individual layer of breast, which enables them to more easily detect abnormalities, especially in dense breast tissue. Perhaps the best benefit of 3D mammography is early cancer detection.
Call 606-408-1111 to schedule your next mammogram at one of our locations, including mobile mammography.
No physician/provider referral required for a screening mammogram.
3D MOBILE MAMMOGRAPHY UNIT
Visits women throughout eastern Kentucky and southern Ohio. For a list of upcoming mobile mammography unit visits or to schedule an appointment, call 606-408-1111 or visit UKKingsDaughters.com.
UK King's Daughters Breast Care Center
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Ashland, Ky.
UK King's Daughters Ohio
2001 Scioto Trail, Suite 200
Portsmouth, Ohio
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Lindsay Montgomery, PA-C

Exhibit ESL-6

Venator Alternatives Comparison

Venator 765kV Substation Site Comparison

Comparison Point	Alternative Site A (Venator Project Site)	Alternative Site B	Difference / Significance
Existing land cover / use	Primarily flat, open grassland and pasture previously used for cattle grazing.	Primarily grassland and pasture; much of the site was previously graded and cleared for future development.	Both sites are largely open. Site A is characterized as flat pasture, while Site B has previously graded areas but retains terrain and space constraints.
Proximity to existing 765kV line	Approximately 0.5 mile east of the site.	Approximately 2 miles from the site.	Site A is approximately 1.5 miles closer to the existing 765kV line.
Proximity to customer site	Approximately 2.5 miles east of the customer site.	Less than 1 mile east of the customer site.	Site B is approximately 1.5 miles or more closer to the customer site.
765kV transmission connections	Two connections totaling less than approximately 2.5 miles.	Two connections of approximately 2.4 miles and 3.15 miles, totaling approximately 5.5 miles; the two connections would cross State Route 5 at separate locations.	Site A requires more than 3 miles less total new 765kV line and avoids the two State Route 5 crossings by 765kV lines required for Site B. (Site A's two 345kV lines would cross State Route 5 in a common corridor.)
345kV customer connections	Two lines, each approximately 3 miles long, paralleling each other over State Route 5 and Williams Creek.	Two parallel lines, each approximately 0.5 mile long.	Site B requires about 2.5 miles less per 345kV connection. The study concludes Site A's shorter 765kV connections outweigh its longer 345kV connections because 765kV construction requires greater ROW width, larger structures, and higher costs.
Streams and wetlands	Two NHD flowlines and two NWI wetlands within 1,000 feet; the footprint can avoid impacts to NHD-mapped streams and NWI-mapped wetlands. Subsequent field delineation indicated that potentially jurisdictional features can also be avoided.	One NHD flowline and four NWI wetlands within 1,000 feet; significant stream impacts would be required to accommodate the substation.	Site A can avoid mapped stream and wetland impacts. Site B would require significant stream impacts and has two more NWI wetlands within 1,000 feet.

Comparison Point	Alternative Site A (Venator Project Site)	Alternative Site B	Difference / Significance
Tree clearing	Primarily pasture/hay, with small forested patches north and southwest of the footprint.	Pasture/hay with deciduous and mixed forest along the footprint boundary; the Siting Study identifies more than two acres of tree clearing.	Site B requires more than two acres of tree clearing; Site A has lower anticipated clearing requirements.
Threatened and endangered species screening	Gray bat, Indiana bat, tricolored bat, pink mucket, salamander mussel, and monarch butterfly identified through IPaC.	Gray bat, Indiana bat, tricolored bat, salamander mussel, and monarch butterfly identified through IPaC.	The listed species are the same except pink mucket, which was identified only for Site A.
Residences / structures	An existing residence and several outbuildings are located within or adjacent to the footprint and would require removal.	No known residences within approximately 1,500 feet of the footprint.	Site A requires removal of an existing residence and outbuildings on the parcel. Site B has greater separation from known residences.
Cemeteries	Three cemeteries are on the property, all outside the footprint.	No cemeteries near the footprint.	Site B has no nearby cemetery constraint. Site A avoids the three known cemeteries.
Pipeline	One natural gas pipeline crosses the parcel, but the footprint can avoid impacts.	No comparable pipeline constraint identified in the Siting Study.	Site A has a pipeline on the parcel but can avoid it; no comparable Site B issue is stated.
Zoning / surrounding uses	Listed as “No Zoning”; located in an industrial and institutional area of unincorporated Boyd County.	Listed as “No Zoning”; located in an industrial and institutional area of unincorporated Boyd County.	No difference. Boyd County has not adopted planning or zoning outside incorporated cities, and both sites are in predominantly industrial and institutional areas.
Substation footprint	Approximately 45 acres, refined from the ideal layout to maximize use of open pastureland and minimize grading.	Approximately 52 acres (1,500 feet by 1,500 feet), reduced due to space and terrain constraints.	Both footprints are smaller than the ideal 1,600-foot by 1,900-foot (approximately 70-acre) layout. Site B’s footprint was limited by available space and terrain.
Preliminary grading (cut / fill)	Approximately 308,548 cubic yards of cut and 62,182 cubic yards of fill.	Approximately 2,000,000 cubic yards of cut and 1,900,000 cubic yards of fill.	Site B requires roughly ten times the total earthwork of Site A, despite a smaller footprint.

Comparison Point	Alternative Site A (Venator Project Site)	Alternative Site B	Difference / Significance
Access	Existing gravel driveway to Virginia Boulevard.	Existing dirt road to Technology Drive.	Both sites have existing access from a public road.
Floodplain	Footprint does not intersect the FEMA 100-year floodplain; mapped floodplain occurs in a low-lying portion of the property near State Route 5.	Footprint does not intersect the FEMA 100-year floodplain.	No difference; neither footprint intersects the FEMA 100-year floodplain.
Property ownership / availability	One parcel of approximately 316 acres; landowner was willing to sell, and Kentucky Power has secured an option to purchase.	Portions of several parcels totaling approximately 170 acres; owner indicated the property is likely to be used for future development.	Site A has a willing seller and an executed option. Site B's owner has identified the property for future development.

Exhibit ESL-7

Photographs Venator Substation Site















VERIFICATION

The undersigned, Emily S. Larson, being duly sworn, deposes and says she is a Project Manager in Environmental Studies for Burns & McDonnell Engineering Company, Inc., 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:
Emily S. Larson
90A81F92E418487...

Emily S. Larson

Commonwealth of Kentucky)
) Case No. 2026-00324
County of Boyd)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Emily S. Larson, on 11/3/2026 | 1:02 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