

Kentucky Power Company
KPSC Case No. 2021-00346
Commission Staff's Second Set of Data Requests
Dated December 15, 2021

DATA REQUEST

KPSC 2_1 Refer to the Application, Exhibit 20, generally. Provide cost estimates for each of the eliminated alternatives included in the Siting Study.

RESPONSE

Estimates for each alternative route were not prepared prior to the preparation of this response. The estimates provided in the filing were for the proposed route only. In an effort to address this request, the Company prepared the estimates below using a preliminary engineering model and publicly available LiDAR data, and extrapolating the cost information generated for the proposed route. The alternative route cost estimates below do not take into account terrain and construction challenges specific to the alternatives.

	Hays Branch-Eastern		Eastern-Garrett		Garrett-Salt Lick		Salt Lick-Soft Shell			
	A	B	C	D	E	F	G	H	I	J
Mileage	1.2	1.4	4.2	3	4.3	4.2	6.3	6	6.1	6.3
Total Cost (\$Million)	6.8	7.9	13.6	9.7	14.6	14.3	21.4	20.4	20.7	21.4

Witness: George Reese

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- KPSC 2_2** Refer to the Application, Exhibit 16, page 1 of 3; Exhibit 20, Attachment H; and Nicholas C. Koehler Direct Testimony (Koehler Testimony) pages 13–15.
- a. Explain why the proposed Eastern Substation does not represent a duplication of resources in the sense that the equipment and upgrades proposed for the Eastern Substation could be installed at the existing Hays Branch substation.
 - b. Explain the need and reasons for constructing a double circuit between the proposed Eastern Substation and the Hays Branch Substation as opposed to a single circuit.
 - c. Explain what, if any, are the future plans of the Eastern Substation, except for providing another feed from the Garrett Substation into the Hays Branch Substation via the proposed Eastern Substation.

RESPONSE

- a. Hays Branch substation is a customer owned substation with minimum Kentucky Power access. Buying and expanding the Hays Branch substation site was considered. However, the smaller footprint of the Hays Branch site, the proximity of the site to Right Fork Beaver Creek and adjacent site topography, as well customer outage constraints prohibited a cost effective substation expansion and construction. Finally, the Hays Branch substation location is subject to flooding.
- b. The Eastern–Hays Branch and Eastern–Morgan Fork lines share structures for approximately 1.3 miles of the line. The double circuit is required to establish a feed to Hays branch and to continue the circuit back to Morgan Fork. A single circuit line cannot accommodate two individual feeds (one to Hays Branch and one to Morgan Fork from Eastern). The Company considered constructing two independent single circuit lines on separate Right-Of-Way (ROW) but rejected the alternative because of increased cost.
- c. The Company anticipates using the Eastern Substation for a future 138/12kV distribution transformer along with 12 kV equipment to accommodate system expansion for load growth and system reliability improvement in the area.

Witness: Nicolas C. Koehler

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KPSC 2_3 Refer to the Koehler Testimony, page 13 lines 18–21 and Application, Exhibit 20, page 19 of 112. Explain why the proposed greenfield line from the Saltlick Substation to the Garrett Substation does not follow the existing right-of-way for the to-be-retired Spring Fork Tap line.

RESPONSE

The Spring Fork Tap line is a radial line. Because there are no other sources for this line, rebuilding the line in the existing right-of-way would require extensive outages for the customers served out of Salt Lick and Spring Fork while the new line is being constructed. The Salt Lick delivery point provides service to East Kentucky Power Corporation's ("EKPC") Big Sandy Rural Electric Cooperative which serves about 4.75 MVA of load. The Spring Fork substation serves 0.3 MVA of load which has about 20 residential customers and serves a small area along Mine Shaft Road.

Witness: Nicolas C. Koehler

Witness: George Reese

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KPSC 2_4 In Kentucky Power's recent CPCN Case No. 2020-00062, (footnote 2) the PJM Regional Transmission Expansion Process (RTEP) identified both Baseline thermal and voltage Criteria violations with the existing 46 kV subtransmission network that would be alleviated through that proposed project. Confirm that there are no thermal or voltage criteria violations associated with the current 46 kV sub transmission network or associated with the current subject 138 kV network that will be alleviated by the current proposed project. If there are any thermal or voltage violations, explain how each one will be alleviated through the proposed project.

RESPONSE

Confirmed. There are no thermal or voltage criteria violations associated with the current 46 kV sub transmission network or associated with the current subject 138 kV network that will be alleviated by the current proposed project.

Witness: Nicolas C. Koehler

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- KPSC 2_5** 5. Refer to the Koehler Testimony, page 10, lines 5–21.
- a. Provide a more detailed explanation of the various outages broken out by year for the various segments of the 46 kV subtransmission line that is to be retired for the last five years.
 - b. Provide the reliability indices annually for the current and last five years associated with the 46 kV circuit that is to be retired.
 - c. Explain whether and how the retirement of the 46 kV circuit affects the Salt Lick Substation.
 - d. Explain whether the 142 open conditions identified through inspections have all been identified in the last year or whether they have been open/ongoing from previous inspections.
 - e. Explain whether the 142 open conditions pertain to the entirety of the 46 kV line that will be retired. If not, explain the number of open conditions that exist for the remainder of the 46 kV line not discussed on page 10.

RESPONSE

a. Please see the tables below. The Company does not maintain its records in any greater detail than provided in attachment KPCO_R_KPSC_1_8_Attachment3 which included a dispatch log and investigation information.

Momentary Outage Cause Codes									
Years	Distribution	Equip-Line-Insulator	Other	Vegetation Fall-In (Outside R/W)	Weather - Ice/Snow	Weather - Lightning/Tstorm	Weather - Other	Weather - Wind	Grand Total
2016	0	1	0	0	0	6	0	1	8
2017	0	0	0	0	0	6	0	0	6
2018	0	0	1	0	0	3	0	2	6
2019	1	0	0	0	0	3	0	3	7
2020	0	0	0	1	2	7	1	0	11
2021	0	0	0	0	0	1	0	0	1
Grand Total	1	1	1	1	2	28	1	6	41

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Permanent Outage Cause Codes				
Years	Customer/ Other Utility	Vegetation Fall-In (Outside R/W)	Weather - Lightning/Tstorm	Grand Total
2016	0	0	1	1
2017	0	0	0	0
2018	0	0	1	1
2019	0	1	0	1
2020	1	1	0	2
2021	0	0	0	0
Grand Total	1	2	2	5

b. Please see the table below.

	SAIDI	SAIFI	MAIFI
2016	67	0.000723	0.005785
2017	0	0	0.004338
2018	6	0.000726	0.004357
2019	141.2527	0.002179	0.005084
2020	24.72073	0.000727	0.008
2021	0	0.000727	0.000727

c. Retirement of the 46 kV circuit and 46 kV Salt Lick delivery point will be accompanied by the installation of the Snag Fork 138 kV delivery point, which is being performed in collaboration with EKPC. The proposed Snag Fork 138 kV delivery point will replace the existing Salt Lick delivery point that provides service to EKPC's Big Sandy Rural Electric Cooperative's (RECC) Salt Lick substation that serves 4.75 MVA of load. EKPC will install a 138 kV substation sourced from the Snag Fork 138 kV delivery point to continue serving Big Sandy RECC. Although Salt Lick delivery point is a single "customer" for Kentucky Power purposes, the Big Sandy RECC serves multiple customers on the Big Sandy RECC distribution system. The Project will provide looped service to the new Snag Fork delivery point.

d. The 142 open conditions were identified through previous inspections. These conditions have been confirmed and monitored during the comprehensive ground inspections that occur every two years and during the aerial patrols that take place no less than frequently than every six months. Kentucky Power continues to monitor open conditions and addresses conditions in a timely fashion so as to ensure reliable service. Kentucky Power Company

e. The 142 open conditions pertain to the entirety of the 46 kV line that will be retired.

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Witness: Nicolas C. Koehler

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- KPSC 2_6** 6. Refer to the Koehler Testimony, page 12, lines 5–14.
- a. Explain and illustrate where the Spring Fork Substation is located, who owns it, and what transmission lines are connected to it.
 - b. Explain who owns the Salt Lick Substation and whether the Spring Fork Tap line is connected to it.
 - c. Refer also to the Application, Exhibit 20, Attachment H, page 25 of 112. Explain whether there are any East Kentucky Power Company transmission lines that would appear, if they were to be added to the maps on pages 21 and 25. If so, provide updated maps,

RESPONSE

- a. The Spring Fork 46 kV Substation is owned by Kentucky Power. See Exhibit 2 to the Application. It is located at -83.00756491, 37.51121228 (3173 Mine Shaft Road, Lambric, KY, 41339). The Spring Fork 46 kV Tap line is connected to the Spring Fork 46 kV Substation.
- b. EKPC owns the Salt Lick substation as shown in Exhibit 2. The Salt Lick Substation is tapped off the Spring Fork Tap line.
- c. The records available to Kentucky Power at the time this response is submitted do not reveal the presence of any East Kentucky Power Corporation transmission lines in the areas displayed on the maps shown at pages 21 and 25 of Attachment H of Exhibit 20 to the Application. The Company will supplement this response if the presence of any such lines is subsequently confirmed.

Witness: Nicolas C. Koehler (parts a & b)

Witness: George Reese (part c)

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- KPSC 2_7** 7. Refer to the Application, Exhibit 20, Attachment H, pages 21 and the Koehler Testimony, page 13, lines 4–9.
- a. Explain the identified needs associated with the Beaver Creek-McKinney #1 circuit.
 - b. Explain whether the Beaver Creek-McKinney line depicted on page 21 has more than one circuit.

RESPONSE

a. “Kentucky Power’s identified needs on the Beaver Creek – McKinney # 1 circuit” were determined generally using the criteria described at pages 8-14 of Exhibit 21 to the Application (“AEP Transmission Planning Criteria and Guidelines for End-of-Life and Other Asset Management Needs”). More specifically, the following needs have been identified with respect to the Beaver Creek – McKinney # 1 circuit:

(a) the age and condition of the 152 structures comprising the circuit. The majority of the structures are wooden. Twenty-two of the 152 structures are 1920s vintage wood structures dating back to the original installation in 1929. Sixty-one of the structures are 1940s vintage wood structures dating back to their installation in 1949. (See Section 3.2.1 of Exhibit 21 to the Application.)

(b) the historical performance of the circuit. (See Section 3.3 of Exhibit 21 to the Application). The Beaver Creek – McKinney # 1 circuit experienced 329,000 customer minutes of interruption between 2015 and 2020. There were 22 outages on the Beaver Creek – McKinney # 1 circuit during the period 2016-2018. See Kentucky Power’s response to KPSC 1-9(a). See also Kentucky Power’s response to KPSC 2-5(a) and KPSC 2-5(b).

(c) the existence of 122 existing and unaddressed physical conditions associated with a transmission line component (open conditions). (See Section 3.2.1 of Exhibit 21 to the Application.) These include:

(i) damaged poles and cross arms (See e.g. Exhibits 12A, 12B, 12C, 12F, 12G, 12H, and 12I);

(ii) damaged conductor and shield wires (See e.g. Exhibits 12D, 12E, and 12J); and

(iii) damaged guy anchor, knee, and vee braces.

See also, Kentucky Power’s response to KPSC 1-8.

b. No. This portion of the Beaver Creek - McKinney line comprises a single circuit.

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Witness: Nicolas C. Koehler (part a)

Witness: George Reese (part b)

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- KPSC 2_8** 8. Refer to the Application, Exhibit 20, Attachment H, pages 21 and 25 of 112.
- a. To the extent that the McKinney-Garrett 46 kV line and the Beaver Creek-Garrett 46 kV line are retired, explain how any customer served off of those two lines will be served.
 - b. Explain whether there are any customers served by the Spring Fork Tap from the Salt Lick Substation to the end of the Tap. If so, explain how these customers will be served.
 - c. Confirm that line segments 28, 26, 24, and 22 represent the preferred route for the new 138 kV line between Soft Shell and Salt Lick Substations.
 - d. Once these line segments are constructed, explain whether there will be two circuits emanating from Soft Shell Substation, the new line and the existing Soft Shell Extension.
 - e. Explain whether the new line will provide a second connection point to the Beaver Creek-Harbert–Spicewood line.
 - f. Explain why the new line could not begin at the Beaver Creek-Harbert–Spicewood line and then extend on to the Salt Lick Substation.
 - g. Line segment 28 parallels Highway 80 E part way. Explain why the new line could not follow the highway up to the point where it intersects line segment 26 and then proceed on the preferred path from there.

RESPONSE

- a. The McKinney-Garrett 46 kV line and the Beaver Creek-Garrett 46 kV line are two line sections of the Beaver Creek – McKinney # 1 circuit. The Company proposes to retire the circuit in its entirety; individual line sections will not be retired in isolation. Customers served by means of the existing McKinney-Garrett 46 kV line and the Beaver Creek-Garrett 46 kV line are served through the Garrett, Salt Lick, and Spring Fork substations. Customers currently served by means of the McKinney-Garrett 46 kV line and the Beaver Creek-Garrett 46 kV line will be served through the Garrett 138 kV Substation, the Snap Fork 138 kV Switching Station, and the Haddix 69 kV Substation following the completion of the project. Specifically,
 - (i) The Garrett 46 kV Substation will be converted to a 138 kV substation and served from the proposed Eastern 138 kV Substation and the existing Soft Shell 138 kV Substation via the proposed Garrett-Soft Shell 138 kV transmission line;
 - (ii) The existing Salt Lick delivery point will be converted to the Snap Fork 138 kV Switching Station. It will be served by the Garrett 138 kV Substation and the proposed Eastern 138 kV Substation via the proposed Soft Shell-Garrett 138 kV transmission line;

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and

(iii) The Spring Fork 46 kV Substation will be retired and existing customers will be served via the Haddix 69 kV Substation.

b. See subpart a. The customers served from Spring Fork Tap are currently served out of the Spring Fork 46 kV Substation and EKPC's Salt Lick substation.

c. The Company cannot confirm the statement in its entirety. The proposed route between the Soft Shell 138 kV Substation and the Salt Lick 138 kV Substation (Route I) is composed of Study Segments 28, 26, 24, 22, and 20.

d. No. Soft Shell substation will have four 138 kV circuits emanating from the substation. There will be three existing circuits towards Beaver Creek, Bonnyman and Spicewood, and one new circuit towards Garrett 138 kV substation.

e. No. This project does not provide a second connection point to the Beaver Creek-Harbert-Spicewood line. The new line will connect directly to the Soft Shell substation.

f. To establish a connection to the Beaver Creek – Herbert – Spicewood line, a new substation would need to be constructed to tie the circuits together. Instead, by going to Soft Shell and constructing 1.6 miles of greenfield line as proposed, the Company is able to use the existing Soft Shell substation and avoid the cost of construction of another substation in the area. Further, finding a suitable site for the new substation would be difficult. Finally, the cost of constructing a new substation for a Beaver Creek – Herbert – Spicewood line would unnecessarily increase the cost of the Project. Establishing a new substation in this area would also result in duplicative equipment because the Soft Shell 138 kV Substation has space available for the new line exit. Any new substation on the Beaver Creek-Harbert-Spicewood line would only serve to connect the new line to Garrett substation. The Company, in proposing the Project, utilized the most cost effective solution to connect to Garrett substation through the new line to Soft Shell rather than establishing another new substation site.

g. Study Segment 28 parallels Highway 80 E to the extent practicable. It intersects with Study Segment 26 at the proposed location because Study Segment 26 must span the existing Beaver Creek-Harbert-Spicewood 138 kV Transmission Line in an area suitable for crossing the existing transmission line. The point where Study Segment 26 Highway 80 intersects with Study Segment 26 would not allow a suitable crossing of the Beaver Creek-Harbert-Spicewood 138 kV Transmission Line.

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Witness: Nicolas C. Koehler (parts a, b, f)

Witness: George Reese (parts c, d, e, g)

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KPSC 2_9 Refer to the Koehler Testimony at 13, lines 18–21 and the Application, Exhibit 20, Attachment H, page 25 of 112. Explain what and where on the map is the location of Snag Fork.

RESPONSE

The Snag Fork Switch Station is not shown on Exhibit 20, Attachment H, page 25 of 112. Exhibit 20 is the siting study, which provides the basis for locating both the proposed transmission line and the proposed Eastern 138 kV Substation. Not all of the individual project components, including the Snag Fork Switch Station, are relevant to the transmission line siting and thus do not appear on the mapping within the siting study.

The proposed Snag Fork Switch structure is expected to be located in Hueysville, KY (GPS Coordinates: 37.47848, -82.89251). It is also shown in Exhibit 10, Page 1, adjacent to proposed EKPC 138 kV substation.

Witness: Nicolas C. Koehler

Witness: George Reese

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- KPSC 2_10** 10. Refer to the Application, Exhibit 20, Attachment H, pages 21 and 24 of 112.
- a. Confirm that the line segments 18 and 14 represent the preferred route for connecting the Salt Lick and Garrett Substations.
 - b. Explain why it is less expensive or preferable to construct a greenfield line (segments 18 and 14) rather than build the new line on existing Spring Fork Tap right-of-way.
 - c. Refer also to the Koehler Testimony, page 10. It is not clear from either of the maps or the description how the Spring Fork Tap relates to the Beaver Creek-McKinney 46 kV circuit. Explain whether the Spring Fork Tap line is included in the reference to Beaver Creek-McKinney 46 kV circuit.

RESPONSE

- a. Confirmed. Study Segments 18 and 14 comprise the preferred route between the Salt Lick substation and Garrett substation.
- b. Please see the Company's response to KPSC 2-3.
- c. The Spring Fork Tap line and Beaver Creek – McKinney #1 line combined together form one circuit which has breakers at McKinney and Beaver Creek substations. See also response to KPSC 2-7(b).

Witness: Nicolas C. Koehler (parts b, c)

Witness: George Reese (part a)

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KPSC 2_11 Refer to Refer to the Application, Exhibit 20, Attachment H, pages 21–25 of 112 and Koehler Testimony, pages 13–15. The 12 project components descriptions of lines, switching stations or substations on pages 13–15 either do not appear or if they are on the maps, do not appear as described on the map on page 21 or on pages 22–25 provide an updated map which matches exactly the description of all 12 project components on pages 13–15.

RESPONSE

Exhibit 20 is the siting study. The siting study provides the basis for locating both the proposed transmission line and the proposed Eastern 138 kV Substation. Not all of the individual project components identified by Company Witness Koehler, particularly those located within the footprint of the existing substations, are relevant to the siting of the proposed transmission line and thus do not appear on the map on page 21 or pages 22-25 of the siting study. The requested information regarding the transmission line components described by Company Witness Koehler is displayed on Exhibit 14 to the application. Exhibit 5-10 provide the requested information regarding those components identified by Company Witness Koehler and located within a substation. The table provided in [KPCO_R_KPSC_2_11_Attachment1](#) links each project component to the relevant reference.

Witness: Nicolas C. Koehler

Witness: George Reese

<u>Project component identified by Mr. Koehler.</u>	<u>Description of component in Mr. Koehler's testimony.</u>	<u>Component location on Exhibit 14 or Exhibits 5-10.</u>
(1)	Construction of approximately 10.3 miles of single circuit 138 kV [transmission line] from Soft Shell to Garrett, picking up Salt Lick Co-op via Snag Fork in Floyd and Knott counties, Kentucky.	Exhibit 14 – Blue dashed line running from the Soft Shell station to the Garrett Station. Salt Lick is the purple box labeled “Salt Lick Station (EKPC).” Snag Fork is the gold box at the right-angle turn in the line beginning at the Soft Shell station. It is labeled “Proposed Snag Fork Switch.”
(2)	The construction of approximately 3 miles of single circuit 138 kV [transmission line] from the Eastern station to the Garrett station. Construct a short extension to the existing Morgan – Fork Hays Branch 138 kV circuit from the Eastern station.	Exhibit 14 – The pink dashed line running from the Garrett station (green box) to the Eastern station (gold box labeled proposed Eastern Substation) is the proposed three-mile 138 kV transmission line. The proposed “short extension to the existing to the existing Morgan Fork – Hays Branch 138 kV circuit” is also described as “the 1.4 miles of double-circuit 138 kV line between Eastern [Substation] and the tap point [cut] on the Morgan Fork – Hays

<u>Project component identified by Mr. Koehler.</u>	<u>Description of component in Mr. Koehler's testimony.</u>	<u>Component location on Exhibit 14 or Exhibits 5-10.</u>
		Branch line" that is addressed in connection with component (4).
(3)	The construction of the double circuit cut into existing Hays Branch – Morgan Fork line to tie into the new Eastern Station.	Exhibit 14 – The cut will be located at the northern terminus of the green dashed line.
(4)	The construction of approximately 1.4 miles of double-circuit 138 kV line between Eastern [Substation] and the tap point [cut] on the Morgan Fork – Hays Branch line.	Exhibit 14 – The double-circuit 138 kV line is illustrated by the green dashed line.
(5)	Relay modification at the Hays Branch substation to allow the tie to Eastern substation.	Exhibit 14 – The Hays Branch substation is depicted by the green box with the purple "Hays Branch Station" label. The relays are located inside the Hays Branch substation.
(6)	Expansion of the Garrett station to convert to 138 kV service by installing two 138 kV breakers on the line exits, a 138/12kV transformer, and a 138 kV circuit switcher.	Exhibit 14 – The existing Garrett substation is depicted by the green box with the purple "Garrett Station" label. Exhibit 6 – Page 1 of Exhibit 6 provides an aerial view of the substation. Schematic drawings of the station components are provided on Confidential

<u>Project component identified by Mr. Koehler.</u>	<u>Description of component in Mr. Koehler's testimony.</u>	<u>Component location on Exhibit 14 or Exhibits 5-10.</u>
		pages 2 and 3 of Exhibit 6.
(7)	<p>The construction of a new 138 kV substation (called Eastern) south of the existing Hays Branch station. Install three 138kV breakers (3000A 40kA) at the new Eastern station in a ring bus arrangement. Due to the site limitations this station will be a modified vertical ring bus utilizing three 138kv box bays with the ring being closed by extending the bus over all three bays on post insulators. Install a new drop-in control module (DICM) 16' x 27' to contain the new relaying.</p>	<p>Exhibit 14 – The proposed Eastern substation is depicted by the gold box with the “Proposed Eastern Substation” label.</p> <p>Exhibit 5 – Page 1 of Exhibit 5 provides an aerial view of the location of the proposed substation. Schematic drawings of the station components are provided on Confidential pages 2 and 3 of Exhibit 5.</p>
(8)	<p>Construction of Snag Fork Switch Station. Install a 3 way phase over phase motorized (automated) switching structure near Salt Lick to serve the EKPC co-op.</p>	<p>Exhibit 14 – The proposed Snag Fork Switching Station is depicted by the gold box with the “Proposed Snag Fork Switch” label.</p> <p>Exhibit 10 – Page 1 of Exhibit 10 provides an aerial view of the location of the proposed switch station. Schematic drawings of the switching station components are</p>

<u>Project component identified by Mr. Koehler.</u>	<u>Description of component in Mr. Koehler's testimony.</u>	<u>Component location on Exhibit 14 or Exhibits 5-10.</u>
		provided on Confidential pages 2 and 3 of Exhibit 10.
(9)	Move and reuse the existing 69 kV rated CB G to the Beaver Creek – McKinney #2 circuit exit at McKinney substation.	<p><u>Exhibit 14</u> – The McKinney Substation is depicted by the green box labeled “McKinney Station.”</p> <p><u>Exhibit 8</u> – Page 1 of Exhibit 8 provides an aerial view of the location of the McKinney Substation. Schematic drawings of the substation components are provided on Confidential pages 2 and 3 of Exhibit 8.</p>
10	Install a 138 kV breaker (3000A 40kA) to accommodate a new line exit towards Garrett station (via Snag Fork) at Softshell substation.	<p><u>Exhibit 14</u> – The Soft Shell Substation is depicted by the green box labeled in purple as “Soft Shell Station.”</p> <p><u>Exhibit 7</u> – Page 1 of Exhibit 7 provides an aerial view of the location of the Soft Shell Substation. Schematic drawings of the substation components</p>

<u>Project component identified by Mr. Koehler.</u>	<u>Description of component in Mr. Koehler's testimony.</u>	<u>Component location on Exhibit 14 or Exhibits 5-10.</u>
		are provided on Confidential pages 2 and 3 of Exhibit 7.
(11)	Retirement of approximately 25 miles of the 46 kV Beaver Creek – McKinney #1 46 kV circuit and Retire Spring Fork Tap.	<p>Exhibit 14 – The Beaver Creek – McKinney # 1 circuit is illustrated by the two gray lines labeled “Beaver Creek – Garrett 46 kV Line To Be Retired” and McKinney – Garrett 46 kV Line To Be Retired.”</p> <p>The Spring Fork 46 kV tap line is illustrated by the gray line labeled “Spring Fork Tap 46 kV Tap [sic]”.</p>
(12)	Distribution line work to accommodate retirement of Spring Fork substation and relocate this load to Haddix substation.	The Spring Fork station is illustrated by the red square labeled “Spring Fork Station.” The distribution work, which constitutes an extension in the ordinary course, is not illustrated.

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- KPSC 2_12** 12. Refer to Kentucky Power's response to Staff's First Request for Information (Staff's First Request), Items 11 and 12.
- a. State whether Kentucky Power has ever had to reopen Commission proceedings in any of the cases provided in the response for the purpose of amending the granted authority to construct a transmission line, when later developments during construction necessitated moving it.
 - b. State whether Kentucky Power anticipates widening the right-of-way from 100 feet in any part of the proposed project. All of the maps submitted show a 100 foot right-of-way. If there is any part of the project that needs a wider right-of-way, submit new maps for Exhibit 3B.
 - c. State where along the proposed route mining affects the engineering design and right-of-way width?

RESPONSE

a. No. The Company's practice in recent filings has been to request a filing corridor. A filing corridor allows the Company to adjust the project centerline and right-of-way to accommodate information received during the development and construction of a transmission line. Because of the lead time required to develop, engineer, and construct a transmission line in the rugged territory comprising the Company's service territory, the Company oftentimes is required to file its application before the required project engineering, right-of-way acquisition, and geotechnical investigation proceed beyond preliminary stages. The Company may be required, for example, to shift the proposed centerline because of previously undiscovered subsurface conditions, to accommodate landowner requests, and engineering constraints that were not known at the time the application was filed. A filing corridor provides the Company with the ability to adjust its construction plans to accommodate these subsequently determined conditions and requirements without the delay and burden on the Commission of a request to re-open a proceeding.

The Commission granted the Company's request in Case No. 2020-00062 (footnote 1) for a 1,000 foot filing corridor. The Company discovered previously unknown conditions during the engineering, development, and construction of the line that necessitated the following adjustments of the centerline within the 1,000 foot filing corridor proposed by the Company:

Modification #1: The Proposed Route was shifted approximately 300 feet to the south between Left Fork of Island Creek Road and Billy Compton Branch in response to constructability issues and landowner input. Landowner input was received from the Sendelbach Family Trust, during Case No. 2018-00209. The Company considered input

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from the Sendelbach Family Trust and modified the proposed route to avoid the subject parcel.

Modification #2: Based on information acquired from Light Detection and Ranging Data (LiDAR) in May 2018, additional modifications to the north and south between Billy Compton Branch and Road Fork were completed to better address constructability and accessibility issues due to steep terrain.

See Kentucky Power's response to KPSC 1-8(b)(2); Kentucky Power's response to KPSC 2-1.

Footnote 1: In the Matter of: Electronic Application Of Kentucky Power Company For A Certificate Of Public Convenience And Necessity To Construct A 138 kV Transmission Line And Associated Facilities In Pike And Floyd Counties (Kewanee-Enterprise Park 138 kV Transmission Line Project).

b. The Company has not identified any areas requiring a right-of-way greater than 100 feet because the need for additional right-of-way is being analyzed as part of project engineering. The Company anticipates that the majority of the right-of-way will be 100 feet wide. In areas where in general the span length between structures is greater than 1,900 feet, right-of-way greater than 100 feet may be required to account for conductor movement under certain weather conditions.

c. Mining activities (historic and active) do not typically dictate the necessary right-of-way width of a transmission line. Historic mining may dictate structure placement and foundation types. The Company will determine structure placement and foundation types once boring activities and a geological assessment are completed. The requested information thus is not currently available.

Witness: Brian K. West (part a)

Witness: George Reese (parts b, c)

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DATA REQUEST

- KPSC 2_13** Refer to the map filed by Western Pocahontas Properties on December 7, 2021, showing an alternative route through their property.
- a. State on what maps in Exhibit 3A and Exhibit 3B this area is located.
 - b. State on what maps in Exhibit 4A and Exhibit 4B this area is located.
 - c. State on what maps in Exhibit 20 this area is located.
 - d. State whether the route proposed by Western Pocahontas Properties was along one of the alternative routes considered in Exhibit 20. If so, name the alternative and describe why it was not chosen.
 - e. If the route proposed by Western Pocahontas Properties was not considered as an alternative route, state why it was not considered.
 - f. State whether the route proposed by Western Pocahontas Properties involves fewer property owners than the route chosen by Kentucky Power.
 - g. If the route proposed by Western Pocahontas Properties involves fewer property owners, explain why it is not preferable to the route Kentucky Power proposes.

RESPONSE

- a. Please see Exhibit 3A Page 5 of 5 and Exhibit 3B Page 5 of 5.
- b. Please see Exhibit 4A Page 5 of 5 and Exhibit 4B Page 5 of 5.
- c. Please see Maps 2D (page 25 of 112), 3D (page 29 of 112), and 4D (page 33 of 112) of Exhibit 20.
- d. A similar, but not exact, Study Segment was reviewed and incorporated into Alternative Route H. Alternative Route H was ultimately eliminated to avoid crossing active mining areas owned by Western Pocahontas Properties.
- e. Not applicable. See the Company's response to subpart (d).
- f. Based on the parcel data obtained from the Knott County Property Valuation Administrator, the route proposed by Western Pocahontas Properties crosses three parcels not crossed by the route selected by Kentucky Power. Two of these parcels are owned by Western Pocahontas Properties and one is owned by a different landowner. The route selected by Kentucky Power crosses two parcels not crossed by the route proposed by Western Pocahontas Properties. One is owned by Western Pocahontas Properties and the other is owned by a different landowner. Therefore, each route impacts one different

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landowner.

g. The route proposed by Western Pocahontas Properties crosses the same number of landowners other than Western Pocahontas as the route proposed by Kentucky Power. See also subparts (d) and (f).

Witness: George Reese

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DATA REQUEST

- KPSC 2_14** Refer to Kentucky Power's response to Western Pocahontas Properties' December 7, 2021 motion.
- a. Provide the individual or individuals representing Western Pocahontas Properties with whom Kentucky Power has discussed the proposed route.
 - b. Provide the date on which the first discussion occurred and the date on which the most recent discussion occurred.

RESPONSE

- a. Jeff Conley, Paul Sebastian, and Allan Robinson.
- b. The first discussion took place on March 24, 2020; the last discussion was held on December 3, 2021.

Witness: George Reese

VERIFICATION

The undersigned, Brian K. West, being duly sworn, deposes and says he is Vice President, Regulatory & Finance for Kentucky Power Company, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

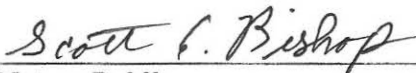


Brian K. West

Commonwealth of Kentucky)
)
County of Boyd)

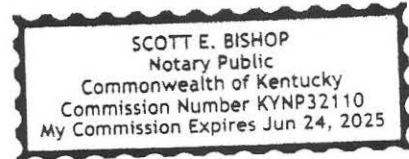
Case No. 2021-00346

Subscribed and sworn before me, a Notary Public, by Brian K. West this 21st day of December, 2021.



Notary Public

My Commission Expires June 24, 2025



Notary ID Number: KYNP 32110

VERIFICATION

The undersigned, Nicolas C. Koehler, being duly sworn, deposes and says he is the Director of Transmission Planning for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the forgoing responses, and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Nicolas C. Koehler

Nicolas C. Koehler

STATE OF OHIO

)

) Case No. 2021-00346

COUNTY OF PICKAWAY

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by

Nicolas C. Koehler, on 12-20-2021.

Paul D. Flory

Notary Public

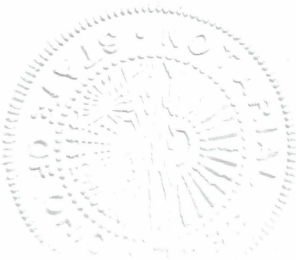
Paul D. Flory
Attorney At Law

Notary Public, State of Ohio

My commission has no expiration date

Sec. 147.03 R.C.

Notary ID Number: _____



VERIFICATION


The undersigned, George T. Reese, being duly sworn, deposes and says he is the Vice President, Business Sector Manager for Power Delivery – Environmental for GAI Consultants, Inc., that he has personal knowledge of the matters set forth in the forgoing responses, and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.


George T. Reese

STATE OF PENNSYLVANIA
COUNTY OF ALLEGHENY

)
) Case No. 2021-00346
)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by
George T. Reese, on December 21, 2021


Notary Public

Notary ID Number: 1185072

Commonwealth of Pennsylvania - Notary Seal
Donna J. Zeno, Notary Public
Allegheny County
My commission expires April 17, 2022
Commission number 1185072
Member, Pennsylvania Association of Notaries