

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC APPLICATION OF KENTUCKY)
UTILITIES COMPANY FOR A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY FOR) CASE NO. 2022-00066
THE CONSTRUCTION OF TRANSMISSION)
FACILITIES IN HARDIN COUNTY, KENTUCKY)**


**RESPONSE OF
KENTUCKY UTILITIES COMPANY
TO
WADE FAMILY FARM MANAGEMENT, LLC'S INITIAL DATA REQUESTS
DATED APRIL 14, 2022**

FILED: APRIL 21, 2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 19th day of April 2022.



Notary Public

Notary Public ID No. 603967

My Commission Expires:

July 11, 2022

VERIFICATION


COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Elizabeth J. McFarland**, being duly sworn, deposes and says that she is Vice President, Transmission for Louisville Gas and Electric Company and Kentucky Utilities Company and an employee of LG&E and KU Services Company, and that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.



Elizabeth J. McFarland

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 20th day of April 2022.



Notary Public
Notary Public ID No. 603967

My Commission Expires:
July 14, 2022

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 1

Responding Witness: Elizabeth J. McFarland

- Q-1. With regard to the Study Area set forth in the Team Spatial Report:
- (a) Please identify by name, organization and title, the person(s) who determined the boundaries of the Study Area;
 - (b) Please describe in detail how the boundaries of the Study Area were determined.
 - (c) Please identify any alternatives to the Study Area in the Team Spatial report that were considered by KU or Team Spatial.
- A-1.
- (a) KU's Transmission Department under Ms. McFarland's direction and supervision determined the boundaries of the Study Area.
 - (b) Study area boundaries were determined by encompassing a section of the existing Brown North-Hardin County 345 kV line that was in closest proximity to the Glendale Megasite.
 - (c) There were no alternative Study Areas evaluated as that would have added significant mileage to the 345 kV routes into the Glendale South Substation site and at increased cost.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 2

Responding Witness: Elizabeth J. McFarland

- Q-2. Please describe why two 345 kV transmission lines are necessary to serve the proposed load at Glendale.
- A-2. See the response to PSC 2-1(a).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 3

Responding Witness: Elizabeth J. McFarland

- Q-3. Please describe each and every reason that KU chose not to co-locate the proposed Western 345 kV Transmission Line in or adjacent to the existing Bonnieville-Hardin County 69 kV transmission line right-of-way.
- A-3. See the response to PSC 2-5(b).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 4

Responding Witness: Elizabeth J. McFarland

- Q-4. Please refer to paragraph four of the Company's application. Please provide any and all documents that support the Company's "expected need for future development in the area including other customers supporting Ford."
- A-4. See the response to PSC 2-3.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 5

Responding Witness: Elizabeth J. McFarland

- Q-5. Please refer to paragraph ten of the Company's application wherein the Company requests permission to deviate from the proposed centerline by up to 500 feet on either side of the centerline. Please confirm whether KU would agree to shift the centerline for that portion of the Western 345 kV Transmission Line Route A that is proposed to cross the Wade Family Farm's property by 500 feet to the east.
- A-5. KU has requested authority to move the location of the proposed lines up to 500 feet on either side of the centerline to account for property owner preferences or unexpected conditions encountered during surveying or construction provided that no new property owners are affected (see Paragraph 10 of KU's Application and Ms. McFarland's testimony, page 9). KU has made that request so that it can make minor deviations from the centerline by up to 500 feet either way without having to return to the Commission for a subsequent approval. It will allow an efficient process by which KU can account for property owner preferences where possible and manage unforeseen site conditions after on-site surveys have been performed. KU will work with all affected property owners, including Wade Family Farm, to accommodate their preferences if possible and feasible given the numerous considerations made in locating a transmission line.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 6

Responding Witness: Robert M. Conroy

- Q-6. Please refer to paragraph fourteen and exhibit twenty of the Company's application. Confirm that KU did not give notice of the proposed Western 345 kV Transmission Line to any landowners whose property would be located on alternative Routes B, C, D, or E.
- A-6. In accordance with 807 KAR 5:120, Section 2(3), KU provided notice to property owners over whose property the transmission line right-of-way is proposed to cross along the proposed route A. To the extent that property owners on alternative routes B, C, and D were also property owners on the proposed route A, KU provided notice to those property owners. All other properties that were only on alternative routes B, C, or D were not provided notice. There is no alternative route E identified.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information**

Dated April 14, 2022

Case No. 2022-00066

Question No. 7

Responding Witness: Elizabeth J. McFarland

Q-7. For each of the Western 345 kV Transmission Line alternative routes, please identify:

- (a) How many residential landowners would have be affected if the transmission line used that alternative route.
- (b) How many non-residential landowners would be affected if the transmission line used that alternative route.
- (c) What percentage of the route is located within a 100-year floodplain.
- (d) What percentage of the route is developed land.
- (e) What percentage of the route is forested land.
- (f) What percentage of the route is agricultural land.
- (g) The length (in linear feet).

A-7.

- (a) See page 53 of 87 of the Team Spatial Siting Study.
Residences within 300' of the proposed 345 kV centerline:
 - Route A: 7, Route B: 13, Route C: 22, Route D: 14
- (b) See page 53 of 87 of the Team Spatial Siting Study.
Commercial and Government Buildings within 300' of the proposed 345 kV centerline:
 - Route A: 2, Route B: 2, Route C: 2, Route D: 2Industrial Buildings within 300' of the proposed 345kV centerline:
 - Route A: 4, Route B: 10, Route C: 10, Route D: 4Agricultural Buildings within 300' of the proposed 345 kV centerline:
 - Route A: 4, Route B: 4, Route C: 2, Route D: 2

(c) – (f) Neither Team Spatial nor KU developed this data as part of their siting work for the proposed transmission lines.

(g) Line Length in linear feet (see page 53 of 87 of the Team Spatial Siting Study):

- Route A: 25,872 lf (4.9 miles), Route B: 24,816 lf (4.7 miles), Route C: 23,232 lf (4.4 miles), Route D: 21,648 lf (4.1 miles).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 8

Responding Witness: Elizabeth J. McFarland

- Q-8. Please refer to Exhibit two, page 54 of KU's application. Please identify who prepared the figures included in the row labeled "Total Project Costs."
- A-8. KU and Team Spatial.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 9

Responding Witness: Elizabeth J. McFarland

- Q-9. For the Western 345 kV Transmission Line Route A proposal, please identify each nearby historic structure of which KU is aware and the distance of each such structure from the proposed centerline.
- A-9. KU has not identified any Eligible or Listed Historic structures within 600' of the Route A Centerline (See page 53 of 87 of the Team Spatial Siting Study, Figure 45 Western Routes Data).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 10

Responding Witness: Elizabeth J. McFarland

- Q-10. Please state whether KU is aware of any known Sandhill Crane roost sites or foraging habitat in the vicinity of the Western 345 kV Transmission Line Route A proposal.
- A-10. KU is not aware of any known Sandhill Crane roost sites or foraging habitat in the vicinity of the Western 345 kV Transmission Line Route A proposal. Source Data Appendix A Page 84 of the Team Spatial Siting Study contains the environmental reference data utilized within the routing study.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 11

Responding Witness: Elizabeth J. McFarland

- Q-11. Please state whether Team Spatial or Arcadis performed any field surveys or site reconnaissance of the Western 345 kV Transmission Line. If the answer is “yes,” please provide any documents prepared or created by Team Spatial or Arcadis arising from or relating to said field survey(s).
- A-11. No field surveys were performed as part of the routing study; however, site visits were performed that produced photos contained in the Application, Exhibit 2, pages 79-81 of 87 (Team Spatial Siting Study, Figures 68, 69, and 70).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 12

Responding Witness: Elizabeth J. McFarland

Q-12. Please refer to exhibit two, page sixty of KU's application. With regard to the Expert Judgment Model, please identify:

- (a) Who determined what weighting would be applied to the four specified criteria.
- (b) Whether the weighting approach was determined prior to, or after, the proposed and alternative routes for the Western 345 kV transmission line were developed.
- (c) Please also provide any documents that support your response to subparts (a) - (b) above.

A-12.

- (a) KU and Team Spatial.
- (b) The weighting percentages were derived prior to the evaluation and determination of the proposed and alternative routes.
- (c) See the Application, Exhibit 2, page 7 (Team Spatial Siting Study, paragraph 1 and Figure 2), that contains a narrative on the evaluation approach utilized within the study to choose both the alternative and proposed routes.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 13

Responding Witness: Elizabeth J. McFarland

- Q-13. Please refer to exhibit two, page sixty-one of KU's application. With regard to the Expert Judgment Model, please provide the composite scores for Western 345 kV Transmission Line Route B and Route C.
- A-13. As detailed on page 60 (the fifth paragraph) of Team Spatial Siting Study, routes B and C were eliminated from further consideration and did not enter into the expert judgement selection phase. Specifically, Route B is potentially unbuildable due to existing retention ponds that the route would traverse and is also in very close proximity to historic or potential historic structures. Route C scores the worst in the Built perspective since it has the most residences within 300' of centerline, most projected residences within 300' of centerline, and the most industrial buildings within 300' of centerline. Route C also scores the 2nd worst from a Natural perspective. Therefore, no composite scores were produced for these two routes.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 14

Responding Witness: Elizabeth J. McFarland

- Q-14. Please refer to the “Glendale West Proposed Route Map Index” included with the Company’s application. For each of the three inset maps, please provide a new inset map that includes the planned locations of transmission towers or other structures, with the type and height of structures (single shaft, H-frame, lattice, etc.) identified.
- A-14. In response to PSC 1-1, KU provided 33 pages of detailed maps of the proposed transmission lines and the proposed locations for support structures for those lines. Those pages are labeled “x of 33.” See pages 24, 25, 26, 27, and 28 of 33 for the maps showing the Wade parcels.

The Wade property will have both “345 kV Steel H-Frame” and “345 kV Lattice Tower Deadend 3DS” structures. See Exhibits 9 and 14 to KU’s Application for a description of 345 kV Steel H-Frame Structures. See Exhibits 8 and 12 to KU’s Application for a description of 345 kV Lattice Tower Deadend 3DS structures.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 15

Responding Witness: Elizabeth J. McFarland

- Q-15. Please refer to page six of the testimony of Beth McFarland. Please state when the TSR submitted to KU's ITO on March 11, 2022 is expected to be completed.
- A-15. See the response to PSC 2-7.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 16

Responding Witness: Elizabeth J. McFarland

- Q-16. Please refer to Source Data Exhibit A, Streams and Wetlands. Please state how Arcadis identified wetlands as there are no source notes.
- A-16. Arcadis, an environmental consulting firm supporting Team Spatial in the siting study, used publicly available information to identify the location of wetlands. The National Wetlands Inventory Data base was a source. Arcadis also developed a desktop review of potential wetlands sites using information from contour elevations, aerial files, flood plans, and soil classifications to assist with identifying wetlands.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 17

Responding Witness: Elizabeth J. McFarland

Q-17. Please refer to Description of Proposed Facilities relating to proposed Glendale South Substation and Glendale Industrial Substation.

- (a) Please identify and describe the methodology for developing and determining the proposed locations for the substations.
- (b) If alternative locations were considered/evaluated, please provide all information on these locations and why they were not selected.
- (c) Did the locations of the proposed substations influence potential transmission line corridors?

A-17.

- (a) Glendale South and Glendale Industrial substation locations within the Glendale site were evaluated for interconnection to available utility transmission-line routes; interference with existing known archeological features, wetlands and waterways; interference with future proposed structures; impact to property owners and the Community; cost and engineering considerations; and proximity to customer load.
- (b) Any alternatives proposed were immediately adjacent to the existing locations and only minor adjustments in final location were made to accommodate final design considerations.
- (c) The locations of the proposed substations were considerations in the transmission lines siting study. The location of the substation influences transmission line structures immediately adjacent to the substation, but did not significantly impact the corridor selection.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 18

Responding Witness: Elizabeth J. McFarland

Q-18. Please refer to Built Criteria section on page eleven and Figure 11: Proximity to Historic Sites Suitability Grid of the Team Spatial report. The Model considers Proximity to “Eligible” Historic and Archaeological Sites.

(a) Please clarify that the Model and Figure 11 includes both “listed” and “eligible” for listing on the NRHP buildings, districts, and sites.

(b) Please provide a list of the historic resources and archaeological sites (for archaeological sites only requesting site numbers)

A-18.

(a) The Model and Figure 11 includes both “listed” and “eligible”. The source data for Figure 5 on Page 11 of Exhibit 2 came from the Kentucky Office of Archology and Kentucky Heritage Council (See Appendix A Pages 85 and 86). Furthermore, this information is described as both Eligible and Listed in Exhibit 2 Figure 45 Page 53 of 87.

(b) The data was brought into the site study via an electronic GIS from Arcadis and supplied to Team Spatial. See the Application, Exhibit 2, Source Data Appendix A Pages 85 and 86 (Team Spatial Siting Study).

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 19

Responding Witness: Elizabeth J. McFarland

- Q-19. Please refer to Figure 11: Proximity to Historic Sites Suitability Grid. The Siting Study identifies “known” cultural resources (e.g., historic resources and archaeological sites listed on the National Register of Historic Places (NRHP)) using data from the Kentucky Heritage Council and Office of State Archaeology.
- (a) Please identify and prepare a figure of what areas of the Study Areas have had cultural resource surveys conducted and areas where no cultural resource surveys have occurred.
 - (b) Please identify acres and percentages of each transmission line alternative that have been surveyed for cultural resources.
 - (c) Please include a list of the cultural resource surveys conducted in the Study Area.
- A-19.
- (a) A desktop cultural resource survey was conducted over the entire study area; however field surveys were not conducted. See the Application, Exhibit 2, Source Data Appendix A Pages 85 and 86 (Team Spatial Siting Study) for the source reference of data provided by Kentucky Office of Archaeology and Kentucky Heritage Council. This information was provided via electronic GIS files.
 - (b) The entire study area was evaluated for cultural resources via electronic desktop review. See the Application, Exhibit 2, page 53 (Team Spatial Siting Study, Figure 45).
 - (c) See the Application, Exhibit 2, Source Data Appendix A Pages 85 and 86 (Team Spatial Siting Study). This data was incorporated into the model from electronic GIS files supplied by Kentucky Office of Archaeology and Kentucky Heritage Council.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 20

Responding Witness: Elizabeth J. McFarland

- Q-20. Please confirm that the Wade Family Farm is identified on Figure 4 of the Team Spatial report as having the center pivot irrigation system. If the answer is “yes,” how does this impact transmission line planning/siting?
- A-20. Yes, the location of the center pivot irrigation system is identified on Figure 4 of the Team Spatial Siting Study and was factored into the routing study evaluation criteria. See the Application, Exhibit 2, pages 33 and 34 (Team Spatial Siting Study, Figures 26 and 27). These figures on pages 33 and 34 show the impact of the center pivot irrigation system in the macro corridor.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 21

Responding Witness: Elizabeth J. McFarland

- Q-21. Please confirm that Arcadis looked only at EPA data in identifying Areas of Concern. If the answer is “no,” please identify what Kentucky specific data what reviewed by Arcadis.
- A-21. Arcadis utilized various sources of data including the EPA to identify Areas of Concern. These sources included US Fish & Wildlife Services, Office of Kentucky State Nature Preserves, Kentucky Heritage Council, Kentucky Office of State Archeologist, US Geologic Survey, US Department of Agriculture, Federal Emergency Management Agency (for flood), Kentucky Geologic Survey, US Army Corps of Engineers, Kentucky Division of Water, and ESRI (for photogrammetry). Along with other sources listed within the Application, Exhibit 2, Appendix A Pages 82 through 84 of the Team Spatial Siting Study.

KENTUCKY UTILITIES COMPANY

**Response to Wade Family Farm Management, LLC's
Initial Request for Information
Dated April 14, 2022**

Case No. 2022-00066

Question No. 22

Responding Witness: Elizabeth J. McFarland

- Q-22. Please confirm that Arcadis did not identify underground storage tanks as part of its analysis.
- A-22. Data associated with underground storage tanks was not utilized within the siting study. This information will be gathered through future on-site field surveys.