MISSOURI PUBLIC SERVICE COMMISSION

STAFF

RECOMMENDATION

AMEREN TRANSMISSION COMPANY OF ILLINOIS

CASE NO. EA-2025-0222

Jefferson City, Missouri
September 15, 2025

** Denotes Confidential Information **

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AMEREN TRANSMISSION COMPANY OF ILLINOIS

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I. Executive Summary

On May 1, 2025, Ameren Transmission Company of Illinois (ATXI) filed an Application seeking a Certificate of Public Convenience and Necessity (CCN) to Construct, Install, Own, Operate, Maintain, and Otherwise Control and manage a new, approximately 3.2 mile long, 138-kV Transmission Line and associated facilities in Perry County, MO, known as the Grand Tower Crossing (GTX) Project (Project). ATXI is collaborating with Citizens Electric Corporation (Citizens) and Ameren Illinois to construct the project.

Staff has reviewed ATXI's CCN Application and Direct Testimony based upon the five factors the Commission listed in *In Re Tartan Energy*, 3 Mo.P.S.C.3d 173 (1994) (Tartan Criteria)[1]:

- Need,
- Qualifications to own, operate, control and manage the facilities and provide the service,
- Financial ability to provide the proposed service,
- Economic feasibility of the proposed project, and
- Promotion of the public interest.

In summary, and based on Staff's review: 1) the Grand Tower Crossing Project is needed; 2) ATXI is qualified to construct, install, own, operate, control, manage, and maintain the

[1] See File No. GA-94-127.

Grand Tower Crossing Project; 3) ATXI has the financial ability to undertake the Grand Tower Crossing Project; 4) the Grand Tower Crossing Project is economically feasible; and 5) the Grand Tower Crossing Project is in the public interest with the conditions recommended by Staff. Ultimately, Staff recommends that the Commission approve the granting of a CCN for the Grand Tower Crossing Project. The conditions recommended by Staff are fully presented in the public interest section of this report, covering the following topics:

- The Right-of-Way acquisition process and micro-siting;
- Reporting requirements; and
- Future landowner communications

II. Application Summary

The GTX transmission line will initially be strung with a 138 kV conductor, but the structures will be designed such that a future 345 kV (maximum potential voltage) circuit can be added in conjunction with the 138 kV circuit. The estimated 1.1 circuit mile Mississippi River crossing will be designed and constructed as a double circuit (both 138 kV and 345 kV rated insulators and conductors will be installed for the river crossing segment during the initial construction of the GTX project[2].

Through a Joint Development Agreement (JDA) that Citizens and ATXI have entered into, both entities have agreed that they will jointly develop the project, but, they will individually be responsible to manage, design, and construct their relevant share of the Project. ATXI will be responsible for constructing the new 138 kV transmission line from the existing Citizens owned Wittenberg substation to a new Ameren Illinois owned and managed substation

[2] See EA-2025-0222, page 8, lines 20-23 of ATXI Witness Eric Paulek's Confidential Direct Testimony.

(Jenkins substation) near the existing Ameren Illinois owned Grand Tower substation on the Illinois side of the Mississippi River.[3] An amendment to the JDA will be adding Ameren Illinois as a party to the agreement, and makes them responsible for managing, designing, constructing, operating, and paying for their portion of the project which begins at the Missouri and Illinois line (roughly at the midpoint of the Mississippi River crossing), and running to the new substation near the existing Grand Tower, Illinois substation.

ATXI and Citizens also entered into an option agreement which could potentially be exercised in the future, if ATXI or an affiliate applied for and received regulatory approval for the sale of assets, and for construction and usage of a future upgrade which could add an additional circuit (up to 345 kV) to the transmission line and supporting equipment associated with the GTX project.[4] The option agreement would allow Citizens to have an exclusive right to purchase the (by then, existing)138 kV conductor, insulators, and hardware; the 138 kV optical ground wire; and any 138 kV single circuit structures that would be part of the GTX project.

The responsibility for upgrades at the existing Seminary and existing Wittenberg substations will be Citizens', because they are the owner of these substations. Additionally, Citizens will be responsible for building a new 138 kV transmission line between the Seminary and Wittenberg substations.

Lastly, ATXI requested waivers for the rate schedule filing requirements of 20 CSR 4240-20.105; the annual reporting requirement of 20 CSR 4240-10.145; the depreciation study

[3] See EA-2025-0222, Application, Paragraph 10, pages 4-5 for a further Ameren Illinois responsibility description.
[4] See EA-2025-0222, page 6, lines 1-15, of ATXI Witness Eric Paulek's Confidential Direct Testimony.

requirement of 20 CSR 4240-3.175; and, the reporting requirements of 20 CSR 4240-3.190.[5] Staff does not oppose the requested waivers.

Staff Witness: Donald Fontana, PE

III. Five Tartan Criteria

A. Whether there is a need for the facilities and service

In evaluating whether a project is needed under the Tartan factors, Staff considers the following questions:

(a) Is the project both important to the public convenience and desirable for the public welfare?

(b) Or, is the project effectively a necessity because the lack of the service is such an inconvenience?

Background

In describing the pertinent background information for the project in the CCN application, ATXI first began by referencing its successful track record developing several Midcontinent Independent System Operator (MISO) Multi-Value projects (MVP).[6] Additionally, ATXI pointed to a recently developed project in conjunction with Citizens, and Wabash Valley Power Alliance, that was constructed in Perry and Cape Girardeau Counties.[7] ATXI, in collaboration with Citizens and Ameren Illinois now desires to jointly construct an approximately 3.2 mile long, 138 kV transmission line and associated facilities for the transmission line, originating in Perry County,

[5] Staff notes that 20 CSR 4240 3.190(4)(A)6. requires the reporting of "Loss of transmission capability that could limit the output of a generating facility or the transfer capability into or out of the electric utility's system." While Staff does not oppose ATXI's waiver request as it does not serve retail customers, Staff notes certain events may occur to ATXI's facilities that may cause a requirement for Ameren Missouri to report to the Commission certain incidents.

[6] See File No. EA-2025-0222, page 2, paragraph 3 of the CCN Application.

[7] See File No. EA-2021-0087 – Limestone Ridge Project.

Missouri, from the existing Citizens owned Wittenberg substation, to a new Ameren Illinois owned substation (Jenkins Substation) that will be built nearby and adjacent to the existing Ameren Illinois owned Grand Tower substation, across the Mississippi River, in Illinois. Citizens and ATXI have also agreed that Citizens will individually design, manage, and construct a separate 138 kV transmission line between their existing Seminary and Wittenberg substations, including installing upgrades to their Seminary substation.

The project collaboration is forward looking and proactive in that the provision for addition of a future 345 kV circuit onto (then) existing structures would enhance the voltage profile of Southeast Missouri by providing infrastructure capable of handling potential generation interconnections in the region; and, it would increase the transfer capability of energy resources in any direction, thereby facilitating any future system retirements.[8] The Applicant asserts the collaboration aspect is mutually beneficial, by allowing the various entities to accomplish construction of an electric transmission line and associated facilities that will address multiple existing North American Electric Reliability Corporation (NERC) issues identified as Transmission Planning Reliability Standard Number TPL-001-5 Low Voltage Condition scenarios.[9] Page 4, Section II, paragraph 9 of the CCN application stated that the design was being done in a manner that could provide strategic value to the region. ATXI's further elaboration of the strategic value term described that "this project would provide additional benefits to customers in the Ameren Missouri Pricing Zone that would not be available otherwise"; it "would address reliability issues in the local area"; it would "provide the foundational piece of a large regional

[8] Staff's Data Request No. 0019

[9] See EA-2025-0222, Application page 7, paragraph 14, and, page 7, lines 13-15 of ATXI Witness Eric Paulek's Confidential Direct Testimony.

expansion that has been under consideration for some time"; and, it would "also provide Citizens with two independent routes, which increases resiliency of the system."[10]

The principle driver which ultimately led to the GTX project, was the acknowledgement of a need to mitigate multiple existing NERC Transmission Planning body of standards (TPL-001) low voltage scenarios for facilities owned by Citizens Electric Corporation (Citizens). The potential low voltages were identified under a NERC Category P6 event. NERC defines a Category P6 event as being a scenario where an initial loss of a generator or transmission component happens, which is followed by system adjustments to mitigate the effects of the loss on the system, followed by the system then experiencing another loss of a generator or transmission component. Under these contingency conditions, the existing Grand Tower – Wittenberg 138 kV transmission line, and the existing Wedekind – Trail of Tears 161 kV transmission line voltages were observed to drop below a 0.9 per-unit (pu) system value, producing concerns that a connected load could potentially be lost at this threshold.[11] Further, Ameren Services conducted an annual TPL-001 assessment of its system in 2022. That assessment included neighboring contingencies, and its results indicated that an N-1-1 contingency involving two Ameren owned transmission lines could result in a loss of over 150 MW of load resulting from low voltage conditions, and identified that the critical contingencies were located on the Grand Tower – Wittenberg 138 kV line and the Wedekind – Trail of Tears 161 kV line. An N-1-1 multiple contingency analysis is mandated by NERC's TPL-001-4 standard, and evaluates a transmission network's reliability after sequential disruptions occur.[12] When modeling a transmission network's behavior under these types of multiple contingency scenarios, the utility can plan additional capacity into the system

[10] Staff's Data Request No. 0022
[11] Staff's Data Request No. 0019.
[12] Contingency Analysis for Transmission Planning | POWER Engineers

that would mitigate low voltages, which their modeling would indicate, similar real-world disruptions represent. MISO's independent study which was performed in their role as planning coordinator for the region yielded similar results as those obtained by the analysis which had been done by Ameren Services, thus confirming what the other entities' studies had identified.[13]

ATXI contends that in addition to improving baseline reliability, this project will, in the future, bring strategic value to the region. Even though the proposed project will be initially energized as a single 138 kV circuit, ATXI will be building structures that will be capable of being upgraded to handle up to a 345 kV circuit at some point in the future, which could be added to the (then) existing 138 kV transmission line structures. ATXI intends to install a 345 kV conductor and insulators for the segment across the estimated 1.1 circuit mile Mississippi River crossing of this project during initial construction, to maximize the river span construction's "window of opportunity" and reduce future construction costs for that segment of a future 345 kV line, since their contractor will already be staged and in position for stringing conductor across the river for the 138 kV circuit. The total approximate length of the remaining portion of the project built in Missouri will be 2.2 miles, and the total approximate overall project length (less the CEC specific 138 kV transmission line between the Seminary & Wittenberg substations), including the portion in Illinois will be 3.2 miles.[14] ATXI indirectly mentioned the existing Mississippi River crossing, Grand Tower-Wittenberg (GT-WITT) line, owned and controlled by CEC in their application testimony. Staff asked ATXI for clarification by email, and followed up asking the question as a Data Request (DR). Staff asked whether the existing crossing could support the additional circuit(s) associated with EA-2025-0222. Based upon the information available to ATXI, the

[13] Staff's Data Request No. 0035
[14] See File No. EA-2025-0222, pages 12 – 13 of ATXI Witness Dan Schmidt's Direct Testimony.

existing GT-WITT is not capable of supporting the additional 138-kV circuit that is designed to improve reliability, associated with meeting NERC standards.

ATXI has noted in their CCN application that the GTX project is needed since the project will provide increased reliability and resiliency to Ameren Missouri customers. Construction of this project will allow a way to re-route service if and/or when existing transmission lines encounter damage or other issues, which is not currently possible. Additionally, ATXI stated that this project will also resolve NERC concerns for facilities owned by Citizens that are located within this service area.

2023 MISO Transmission Expansion Plan (MTEP23)

Additional supporting documentation from MTEP23, indicating need for the project is outlined in this section. After the proposed project was submitted to MISO for review in September, 2022, this project was incorporated into MISO's planning in MTEP23. The New Seminary – Wittenberg – Grand Tower 138 kV project was identified and ranked 9th out of the Top 10 projects in MTEP23 Appendix A. In Figure 1.4-3 on page 26 of the MTEP23 study, the Project Driver was identified as being due to Baseline Reliability.

Rank	Project Name	Project Driver	Cost (millions)
1	Amite South Reliability Project - Phase 1 - Alternative	Other – Reliability	$1,700
2	Southeast Texas Area Reliability Project	Baseline Reliability	$1,111
3	Amite South Reliability Project - Phase 2	Other – Reliability	$290
4	New Baldwin Area Reactive Support	Other – Reliability	$170
5	New South Central Illinois Transmission Expansion	Other – Reliability	$168
6	New Slugger 138 kV Load	Other – Load Growth	$124
7	New Kokomo Fusion Phase 1 – 230/69 kV Substation	Other – Load Growth	$92
8	Rebuild Sioux-Meppen North-Hull 138 kV Line	Other – Age and Condition	$78
9	New Seminary – Wittenberg – Grand Tower 138 kV	Baseline Reliability	$68
10	Southland Expansion and Upgrades	Other – Load Growth	$58

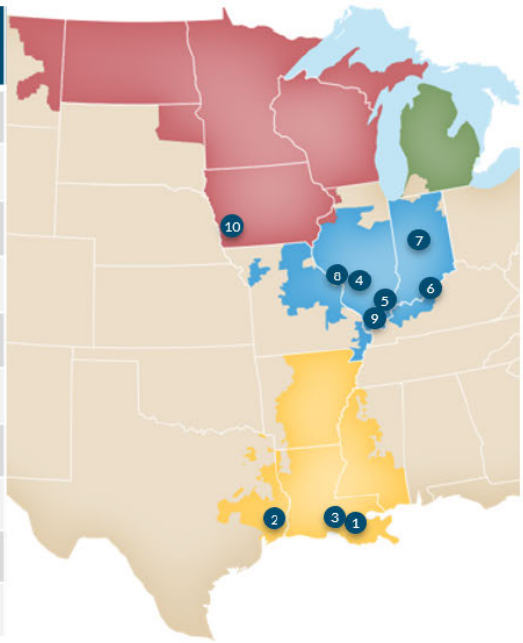


Figure 1.4-3: List of top ten proposed MTEP23 projects as of September 29, 2023, blanket renewal projects excluded from ranking.

2023 MISO Transmission Expansion Plan [26

Page 52 of MTEP23 details the MTEP project evaluation process. A screen clip of that description is attached below:

MISO strategically set up our local planning processes to assume FERC Order 890 transparency requirements for Transmission Owner submissions resulting in different study approaches based on the types of projects submitted by Transmission Owners.

- **Verify need:** Confirmation of system need identified in project submission including to meet compliance with applicable National Electric Reliability Organization reliability standards and reliability standards adopted by Regional Reliability Organizations, and applicable within the Transmission Provider Region. MISO must verify the need for alternatives to adequately examine their effectiveness.
- **No harm:** Ensure a submitted project does not create a system issue. Includes projects that create model changes like contingency definitions, line ratings, or line impedances.
- **Post only:** Provided for FERC Order 890 transparency provisions. May include controls equipment to communicate remotely with the facility. This information is not able to be represented with model changes.

Excerpts from Pages 53 & 54 of MTEP23 further state:

MTEP23 project recommendations

As the result of the MTEP23 reliability assessments, 45 Baseline Reliability Projects totaling $1.7 billion are included in the MTEP23 proposed Appendix A, accounting for 19% of total transmission infrastructure investment in MTEP23. The vast majority of the recommended projects are driven by reliability (either baseline or local reliability), load growth and age and condition, and are expected to be in service within three years.

Baseline Reliability Projects

According to Attachment FF of the MISO Tariff, "Baseline Reliability Projects are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable national Electric Reliability Organization (ERO) reliability standards and reliability standards adopted by Regional Reliability Organizations and applicable within the Transmission Provider Region."

MISO identifies the need (verifies the need) or violations (noted in tables with "Limiting Element") that are required to be resolved per NERC Transmission Planning Standards and reliability standards adopted by Regional Entities. MISO then reviews the effectiveness of the identified solution that resolves the violations. This is completed by reviewing the impacts to a power flow model with and without the project. Sometimes the needs or violations were identified in a previous MTEP cycle. All costs for Baseline Reliability expansion projects are recovered through Attachment O by the Transmission Owner(s) developing such projects.

The screen clip of MTEP23 Figure 4.2-4 below notes that the data was current as of September, 2023. This figure labelled the "New Seminary-Wittenberg-Grand Tower 138 kV line" as Number 6 of the 10 projects shown. Figure 4.2-4 further demonstrates that MISO views this as a needed and necessary project in the MISO Central Region with respect to the baseline reliability of the overall system.

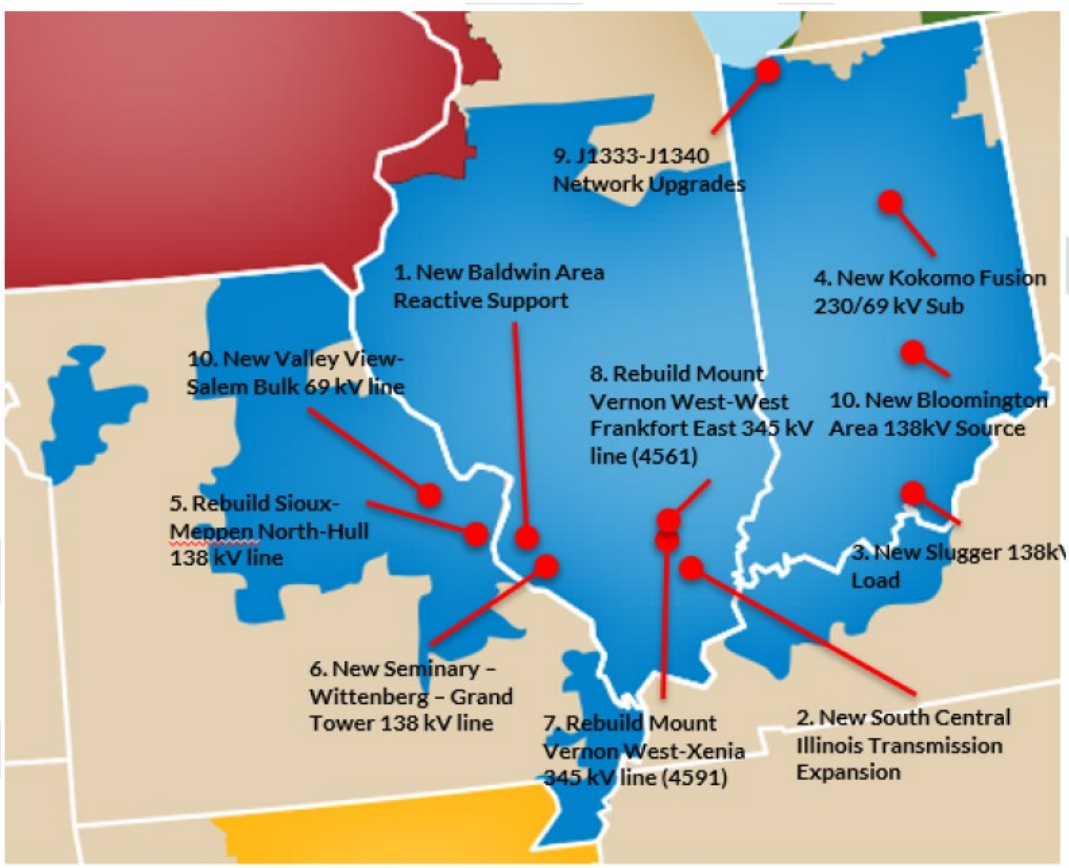


Figure 4.2-4: Central region top ten projects by cost (data as of 9-29-2023)

Page 60 of MTEP23 labels the proposed line Project 23846, and lists various project statistics:

Baseline Reliability Projects

Project 23846 – New Seminary – Wittenburg – Grand Tower 138 kV line

Project Description: This project will include building a new Perryville (Seminary) - Wittenberg - Grand Tower 138 kV line that crosses the Missouri/Illinois Border. The total estimated cost of this project is $68 million and has an expected in-service date of December 31, 2026.

Project Need: This project is needed to mitigate multiple Transmission System Planning Performance Requirements for (TPL-001) low voltage violations.

Alternatives Considered: No alternatives were considered.

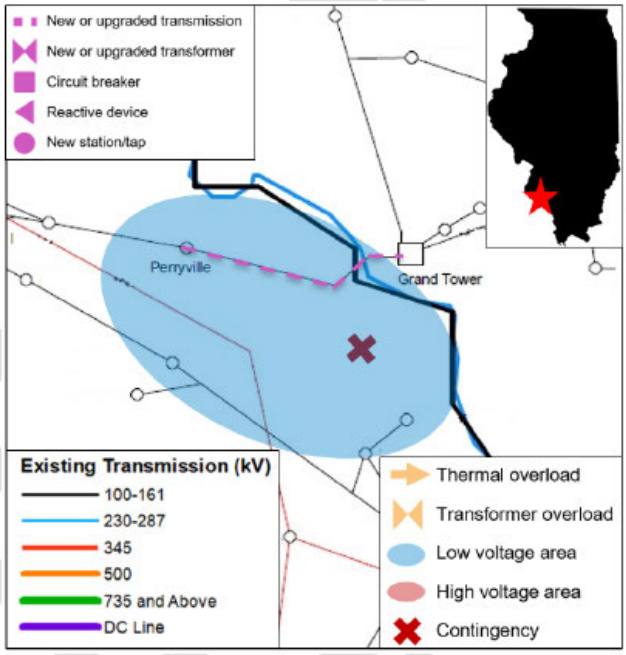


Figure 4.3.1-1: P23846 Geographic transmission map of project area

Cont Type	Limiting Element	Rating (pu)	Pre-Project Loading (pu)	Post-Project Loading (pu)
P6	[AMMO] Seminary 138 kV	0.95	0.8623	0.9921
P6	[AMMO] New Bourbon 138 kV	0.95	0.8951	0.9881

Table 4.3.1-1: P23846 voltage loading drivers

Conclusion on Need

In conclusion, the GTX project is needed to improve baseline reliability in Southeast Missouri. The various studies that were conducted, including MISO's independent study, confirm that the potential for the loss of load is real. Construction of this project will address and correct the identified TPL-001 low voltage scenarios and improve the system. Additionally, the forethought of building structures that can be upgraded in the future to include an additional 345 kV circuit, and taking advantage of the contractors staging and stringing 138 kV and 345 kV conductors (including insulators) while set up for the Mississippi River crossing is reasonable based on the facts presented. The GTX project will allow an opportunity for increased transfer capability of energy resources in the area, and will facilitate the transmission system by providing more operational leeway, such as may be needed for addition of future interconnection points, and will ease overall system operations during future retirements. The design service life of the 138 kV system is estimated to be in excess of 80 years, which can only strengthen the overall system, by providing flexibility and reliability for the long term, above what currently exists.

For these reasons, Staff recommends the Commission approve the CCN.

Staff Witness: Donald Fontana, PE

B. Whether the applicant is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Project

ATXI is an affiliate of Ameren Corporation (Ameren Corp.), and obtained a Certificate of Authority to conduct business in the State on August 1, 2012.[15] The Missouri Public Service Commission has previously granted CCNs dating back to 2015, that were developed as part of the MISO MVP's in Missouri and Illinois, stemming from MISO's Long-Range Transmission

[15] ATXI was first recognized by the Commission as a public utility in File No. EA-2015-0145.

Planning (LRTP) initiative to develop an updated regional transmission trunk-line also referred to as a "transmission backbone". Some previous ATXI MVPs in Missouri include: The Limestone Ridge project in collaboration with the Wabash Valley Power Alliance (15-mile, 138 kV transmission line and substations in SE MO); the Mark Twain Transmission Project (96-mile, 345 kV transmission line & substation in NE MO); the Illinois Rivers Project (transmission line from Palmyra, Missouri, to Sugar Creek, Indiana).

ATXI is currently seeking a CCN for the Grand Tower Crossing (GTX) Project to construct of approximately 3.2-miles of new 138 kV transmission lines from an existing Citizens Electric Corporation (Citizens) owned substation in Perry County, Missouri across the Mississippi to a new substation in Jackson County, Illinois.

ATXI will utilize Ameren Services for construction management and supervision of the ATXI – Grand Tower Crossing Project. ATXI witness Eric C. Paulek provides further detail about the construction management, operation, and maintenance of the Grand Tower Crossing Project in his Direct Testimony on pages 8-11 including a discussion of the Ameren Services documented procedures in the event of an unplanned outage pages 26-27. Joint Development Agreements (JDA's) specific to each entity's role between ATXI, Citizens, and Ameren Illinois. were reviewed by Staff. The various JDA's detail each entity's obligations regarding ownership, operation, repair, vegetation management, routine patrols, etc., and have been reviewed by staff.[16]

The conclusion of Staff is that ATXI is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Project.

Staff Witness: Coty King

[16] EA-2025-0222 ATXI Paulek _ Schedule ECP-01 – ATXI-Citizens Electric Joint Development Agreement,; ATXI Paulek _ Schedule ECP-02 – ATXI-Citizens Electric Option Agreement

C. Whether the applicant has the financial ability for the undertaking

Considering ATXI, Ameren Illinois Company (Ameren Illinois) and Ameren Corp's financial capacity, the Applicant has the financial ability for the requested CCN.

ATXI's estimated cost of the Project for which ATXI is responsible in Missouri includes a base cost of ** [redacted] ** with a potential contingency cost bringing the total up to ** [redacted] **.[17] The range of projected costs reflects the uncertainty associated with various conditions that may arise as the Project progresses through its design, engineering, and construction.[18] In more detail, the difference in the cost estimate ranges is primarily due to the river-crossing structures, which are less common than other components of the Project and more difficult to construct; therefore, they warrant greater variability in cost.[19]

In addition to the costs associated with the Project's Illinois portion, which is the responsibility of Ameren Illinois, there are additional costs necessary for the Project to interconnect with Citizen's Wittenberg substation, for which Citizens will be responsible.[20] The estimated range of costs for the portion of the Project in Illinois, which Ameren Illinois will be responsible for, is estimated to be between ** [redacted] ** and ** [redacted] **.[21]

ATXI will finance the Project with either available cash on hand or short-term borrowings.[22] The short-term borrowings would be available under Ameren's Utility Money Pool arrangement and will be replaced with a permanent source of capital that includes a balanced blend

[17] Page 22, lines 19-22, Eric C. Paulek's Direct Testimony.
[18] Page 23, lines 14-15, Eric C. Paulek's Direct Testimony.
[19] Staff's Data Request No. 0007.
[20] Page 24, lines 1-3, Eric C. Paulek's Direct Testimony.
[21] Staff's Data Request No. 0008.
[22] Paragraph 17, The Application.

of long-term debt and common equity for ATXI.[23] As of March 31, 2025, ATXI had $478.475 million available under Ameren's Utility Money Pool.[24]

The estimated cost of the Project is insignificant compared to ATXI's capital expenditure plan. For example, ATXI's and Ameren Corp.'s projected capital expenditures from 2025 through 2029 could be an average estimation of approximately $2.73 billion and $26.27 billion, respectively.[25] As a private company, ATXI sought an investment credit rating from Moody's and received an A2 credit rating, based in large part on the supportive Federal Energy Regulatory Commission (FERC) regulatory framework and the strength of ATXI's credit metrics.[26] S&P assigned Ameren Illinois a rating of "BBB+". S&P and Moody's have both rated Ameren Corp. as investment grade. S&P assigned Ameren Corp. a rating of "BBB+", while Moody's rated them as "Baa1".[27] Additionally, the incremental debt and associated interest required to support the Project are small relative to ATXI's total borrowing capacity and related interest expense.[28] As such, the Project is not expected to significantly affect ATXI's ability to finance or fund its ongoing needs. Ameren Illinois plans to invest between $6.5 billion and $7.0 billion in its utility businesses from 2025 to 2029.[29] Ameren Corp. plans to invest approximately $16.8 billion in its utility businesses from 2025 to 2029.[30]

To assess the financial impact of the Projects, Staff conducted a pro forma analysis using key financial ratios such as Debt to Earnings before Interest, Taxes, Depreciation, and

[23] Page 24, lines 5-8, Eric C. Paulek's Direct Testimony.
[24] Staff Data Request No. 0006.
[25] Staff Data Request No. 0004.
[26] Pages 10, lines 2-4, Greg Gudeman's Direct Testimony, EA-2025-0087.
[27] S&P Capital IQ Pro, retrieved January 18, 2025.
[28] Page 24, lines 20-23, Eric C. Paulek's Direct Testimony.
[29] Staff Data Request No. 0008(2).
[30] Schedule 5, The Application, EF-2025-0135.

Amortization (EBITDA) and Funds from Operations (FFO) to Debt. As shown in Table 1, Staff found that there is no material change in Ameren Missouri's financial risk profile due to the Projects.[31]

Table 1. ATXI Financial Ratios[32]

	As of December 31, 2023			Pro Forma		
FFO / Debt (%)	**	[redacted]	**	**	[redacted]	**
Debt / EBITDA (x)	**	[redacted]	**	**	[redacted]	**
Debt / Capital (%)	**	[redacted]	**	**	[redacted]	**

ATXI is a transmission-only company with a low business risk profile. Considering the proposed cost, which is less than 5% of ATXI's, Ameren Illinois's and Ameren Corp.'s capital expenditure over five years, and the financial impact of the projects, it is reasonable to conclude that ATXI has the financial ability to own, operate, and maintain the Project.

Staff Witness: Seoung Joun Won, PhD

D. Whether the proposal is economically feasible

The Cambridge Dictionary defines "economic feasibility" as "the degree to which the economic advantages of something to be made, done, or achieved are greater than the economic costs."[33] Feasibility studies should assess whether a proposed project or solution is financially viable and cost-effective with respect to given alternative solutions.

Staff finds the following questions to be appropriate in making its recommendation regarding the economic feasibility of the Projects:

a. Is the project of sufficient importance to warrant the expense of making it?

[31] S&P's Ratings Services, RatingsDirect, "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded"
[32] Staff's Data Request Nos. 0001 and 0002.
[33] https://dictionary.cambridge.org/us/dictionary/english/economic-feasibility (21NOV2024).

b. Or, is the project of such an improvement as to justify or warrant the expense of making the improvement?

ATXI discusses economic feasibility in Section 15(b) of its application. Mr. Paulek also discusses the benefits on page 7 of this testimony. None of the discussions demonstrate quantitatively that the benefits of the project outweigh the costs. Mr. Paulek also discusses on pages 22-23 of his testimony that the project cost is a function of a base and contingent costs. The base cost is ** [redacted] **, but the contingency cost has a maximum of ** [redacted] **. The uncertainty in contingency costs can undermine the economic feasibility of the project unless ATXI can provide sufficient documentation to the contrary. In response, Staff issued Staff DR No. 0041, which asked for, among other things, "a detailed economic analysis to demonstrate that the benefits outweigh the costs." In response, while Ameren Missouri did not provide a quantitative economic analysis, there was a discussion that "Ultimately, the Project as proposed provides a combination of resolving system constraints, increasing reliability, addressing near-term energy needs and providing flexibility for meeting long-term energy needs, in a cost-effective manner. The result will be a more reliable, resilient transmission system that will better serve customers today and be better prepared for future energy needs as well."

This response is consistent with the 2023 MISO Transmission Expansion Plan (MTEP23). According to MISO's MTEP23 report the plan seeks to address: load growth; reliability; and age and condition of the transmission system.[34] Generally, Staff lacks the ability to challenge the analysis of MISO, but is aware that other entities have done so. While Staff has concerns that the benefits of MTEP projects may be overstated, none of that analysis is specific to the proposed ATXI project. ATXI proposed an alternative project discussed in Staff DR 0035. While the

[34] MISO Transmission Expansion Plan-MTEP23: Planning Advisory Committee September 28, 2023.

estimated cost of this alternative project was not given, it stated that "it underperformed compared to the proposed Project". Staff lacks the resources to properly evaluate alternative resource solutions to see if the improvement justifies the expense of making it. However, Staff agrees that the benefits of the proposed ATXI project likely exceed its costs because the project has been approved by FERC for recovery through the MISO Open Access Transmission Tariff (OATT). Based on the discussion above, it is reasonable to assume that the project could be economically feasible.

Staff Witness: Justin Tevie

E. Whether the proposal is in the Public Interest

Staff assesses a proposed project to determine whether the case is in the public interest. This assessment involves evaluation of all other Tartan Criteria, in addition to whether the project is in the public interest, including: need for the project; the economic feasibility of the project; the qualifications of the company to construct and operate the project; and, the financial capability of the company making the request for approval of a CCN. Staff studies each of the Tartan Criteria independently, and uses that review process to consider whether or not the project promotes the public interest as a whole. Staff also considers whether any other aspects of the project not encompassed by the Tartan Criteria review exist, and if they do, whether they should also be considered in the assessment of public interest factors. For this case, ATXI's routing study; its preferred route selection process; and, its public engagement process was also reviewed as part of the overall public interest evaluation. Lastly, Staff recommends several conditions to the granting of the CCN, similar to recommendations made on past transmission line CCN cases.

Staff Witness: Donald Fontana, PE

ATXI Public Engagement

Staff reviewed testimony and exhibits from ATXI witnesses that conducted the routing study and public engagement components for the GTX Project.

In January 2025, ATXI began holding a series of public information meetings for the Grand Tower Crossing Project. ATXI witness Leah Dettmers testified about the Community Engagement process and local Open House meetings, conducted by ATXI and their consultant, to provide landowners along the proposed route segments, as well as members of the public the opportunity to provide input. ATXI accomplished this process by the use of in-person and virtual meetings, and through various types of written correspondence that was mailed to property owners.[35] A summary of the various methods used to interact with landowners and the general public includes the following:

1) An in-person Community Representative Forum (CRF) in Perry County, Missouri

2) Two phases of in-person open houses in Perry County, Missouri

3) A website dedicated to the Project

4) A self-paced, self-guided virtual open house with an interactive mapping tool, county level maps, and a comment feature.

More specifically, ATXI held a CRF meeting in Perry County, Missouri, and virtually on January 16, 2025, to discuss the Project.[36]

Two open house meetings were held during January 16, 2025, at the Perryville Knights of Columbus in Perryville, Missouri. Two additional open houses were held on February 25, 2025, at Trinity Lutheran Church in Altenburg, Missouri.[37]

[35] See EA-2025-0222; ATXI Dettmers Direct FINAL testimony; ATXI Dettmers_Schedule LD-01, Part 3; and, ATXI Dettmers_Schedule LD-01, Part 4 .

[36] Direct testimony of ATXI witness Leah Dettmers, page 6, line 18-20. Staff representatives virtually attended the January 16, 2025 CRF meeting virtually.

[37] Direct testimony of ATXI Witness Leah Dettmers Page 9 line 14- Page 12 line 12.

Invitations to the January 2025 public meetings were mailed on postcards with a map of the project to approx. 151 landowners and stakeholders.

ATXI published a general notice of the project and the public meetings in the Southeast Missourian and the Republican Monitor in Perry County, as well as in the Southern Illinoisan covering Jackson County, Illinois, for three weeks prior to the meetings.

ATXI's Public Engagement Team mailed letters with project information to County Clerk in Perry County, Missouri, and Jackson County, Illinois where the project would be occurring.

ATXI sent the same notification letter and project map to state and federal officials, including a designated MOPSC staff member, and Illinois Commerce Commission.

In total, about 10 people were listed on sign in sheets from the January 2025 open house meetings. Per Leah Dettmers, some meeting attendees opted not to sign in, so there were more attendees than there are signatures on the sign in sheets.

Two additional open houses were held on February 25, 2025, at Trinity Lutheran Church in Altenburg, Missouri. Invitations to the February 2025 public meetings were mailed on postcards with a map of the project to approx. 133 landowners and stakeholders.[38]

ATXI published a general notice of the project and the public meetings in the Southeast Missourian and the Republican Monitor in Perry County, as well as in the Southern Illinoisan covering Jackson County, Illinois, for three weeks prior to the meetings.

In total, about 21 people were listed on sign in sheets from the February 2025 open house meetings. Per Leah Dettmers, "As attendees were not required to sign in, these estimates of attendance do not include those who chose not to do so."[39]

[38] Direct testimony of ATXI Witness Leah Dettmers Page 13 lines 16 -18.
[39] Direct testimony of ATXI Witness Leah Dettmers Page 11 lines 19-20.

During phase 1 public engagement (December 20, 2024 to February 23, 2025), the website had over 560-page views from about 337 unique visitors.

During phase 2 (February 24, 2025 to April 11, 2025), the website had over 170-page views from about 107 unique visitors.[40]

Staff Witness: Coty King

Commission Public Hearings and Comments

The Commission held Local Public Hearings (LPHs) on August 19, 2025 (virtual), and on August 26, 2025 (in-person), at Trinity Lutheran Church in Altenburg, Missouri. One individual testified during the in-person their concern was that the proposed route is a majority of one land owner LPH.[41]

As of August 26, 2025, the Commission received one consumer comment related to this case. The concern related in this comment was that the majority of the proposed route impacts only one land owner.

Staff Witness: Coty King

Routing Study Overview

Staff reviewed testimony and exhibits from ATXI witnesses that conducted the routing study and public engagement components for the Grand Tower Crossing project.[42] ATXI has teamed with HDR, Inc. (HDR) on prior transmission line projects in Missouri and other states, and utilized their consulting services and professional skills in development of these projects. In

[40] Direct testimony of ATXI Witness Leah Dettmers Page 21 line 10 -Page 22 line 1.

[41] Staff representatives attended both Local Public Hearings

[42] ATXI witness Dan Schmidt submitted testimony and exhibits for the routing study, and ATXI witness Lea Dettmers submitted testimony and exhibits for the public engagement components.

conjunction with Staff from ATXI, HDR again partnered and jointly formed a Routing Team (Team) for the proposed Grand Tower Crossing (GTX) project, for which a CCN is being sought by ATXI. An overall routing study for the project was conducted by the Team, in order to investigate and document all potential route options. These route options were then further evaluated to ultimately recommend a final proposed route for this project. The final proposed route consisted of an approximately 3.2 circuit mile[43] 138 kV transmission line, and with structures that can be upgraded to include an additional, future, up to 345 kV circuit. The proposed route connects the existing Citizens Electric Corporation's (Citizens) owned Wittenberg Substation in Perry County, Missouri, to a new Ameren Illinois owned Jenkins Substation in Jackson County, Illinois.[44]

ATXI witness Dan Schmidt's testimony described the route selection process as a "multi-stage process that takes a large study area and, using relevant sensitivity and opportunity criteria, reduces that large study area into a series of approximate routes, or corridors, refines those into routes (i.e., centerlines), compares those routes, and selects the best one based on quantitative and qualitative review." ATXI witness Dan Schmidt further stated "The route selection process consisted of these major steps:

1. Study Area Identification
2. Identification of Potential Route Corridors
3. Public and Agency Engagement – Phase 1
4. Identification of Preliminary Route Alternatives
5. Public and Agency Engagement– Phase 2
6. Final Route Determination.

[43] The application said approximately 4-miles long.
[44] ATXI Witness Dan Schmidt submitted testimony and exhibits for the routing study in Case No. EA-2025-0222.

The goal of the route selection process was to identify the routes that best minimize potential impact to sensitivities, best use existing opportunities, and adhere to the technical guidelines and statutory requirements."[45]

The Team began their study of potential route corridors by classifying certain aspects of the land over which a future transmission line might be recommended to be located upon. The classifications they used for potential route corridors in the route development study were termed: Sensitivities; Opportunities; Technical Guidelines; and, Statutory Requirements, as detailed below and paraphrased from ATXI Witness Dan Schmidt's Direct Testimony.

Sensitivities - natural or man-made environmental resources or conditions that might limit transmission line development. An example of a natural sensitivity could be something such as an environmentally necessary component providing habitat areas for a protected species; or a known archaeological site. A man-made sensitivity could be a land use constraint, such as a deed restricted parcel, or a farm enrolled in a federal program such as the Conservation Reserve Program (CRP).

Opportunities - pre-existing linear infrastructure or features that offer existing linear corridors. Examples being existing rights-of-way; roads; transmission lines; and public land survey system divisions of land. Transmission line development is potentially compatible with linear corridors provided by these types of examples, and impacts to sensitivities may be reduced by following categories of features such as these.

Technical Guidelines - the specific engineering; cost; and, construction-related requirements and objectives of the project. An example could be reducing the length of a river crossing, due to adjustment of the skew angle. This could result in minimizing the number or size of dead-end

[45] ATXI Witness Dan Schmidt testimony pg.5&6, lines 23-24, lines 1-12.

structures that would be needed for a crossing of the Mississippi River, as opposed to a shorter length of span, oriented more perpendicularly to the river and requiring less infrastructure to support the span.

Statutory Requirements - approvals, licenses, or permits required by law for engaging in a certain activity. Examples of permits required by law would be permits from the U.S. Army Corps of Engineers for impacts to wetlands or waters of the United States, or a Federal Emergency Management Agency (FEMA) No-Rise Certificate, certifying that the Base Flood Elevation (BFE) won't be increased due to the placement of fill within a Regulated Floodway of the Mississippi River, which would also be required in conjunction with FEMA Floodplain Development permits for any work conducted within a Regulatory Floodplain.

For the preliminary stages of selecting potential route corridors for the Grand Tower Crossing project, the ATXI / HDR routing team defined the fixed starting and ending points of the project, then evaluated natural features, including streams, wetlands, forested areas, protected species (and the habitats of those protected species), including karst areas that could potentially be utilized by various bat populations. Other sensitivities the team screened for and evaluated were any known or likely archaeological sites, and historical districts / historical structures.

The various corridors were similarly evaluated to identify the locations of any likely opportunities. There were existing transmission line corridors which allowed an opportunity to route the new transmission line further away from homes in some areas. Another opportunity, such as utilizing the proximity to existing transmission line corridors, was that wooded areas and steep terrain could potentially be avoided if new greenfield areas didn't have to be cleared and an existing route could be paralleled.

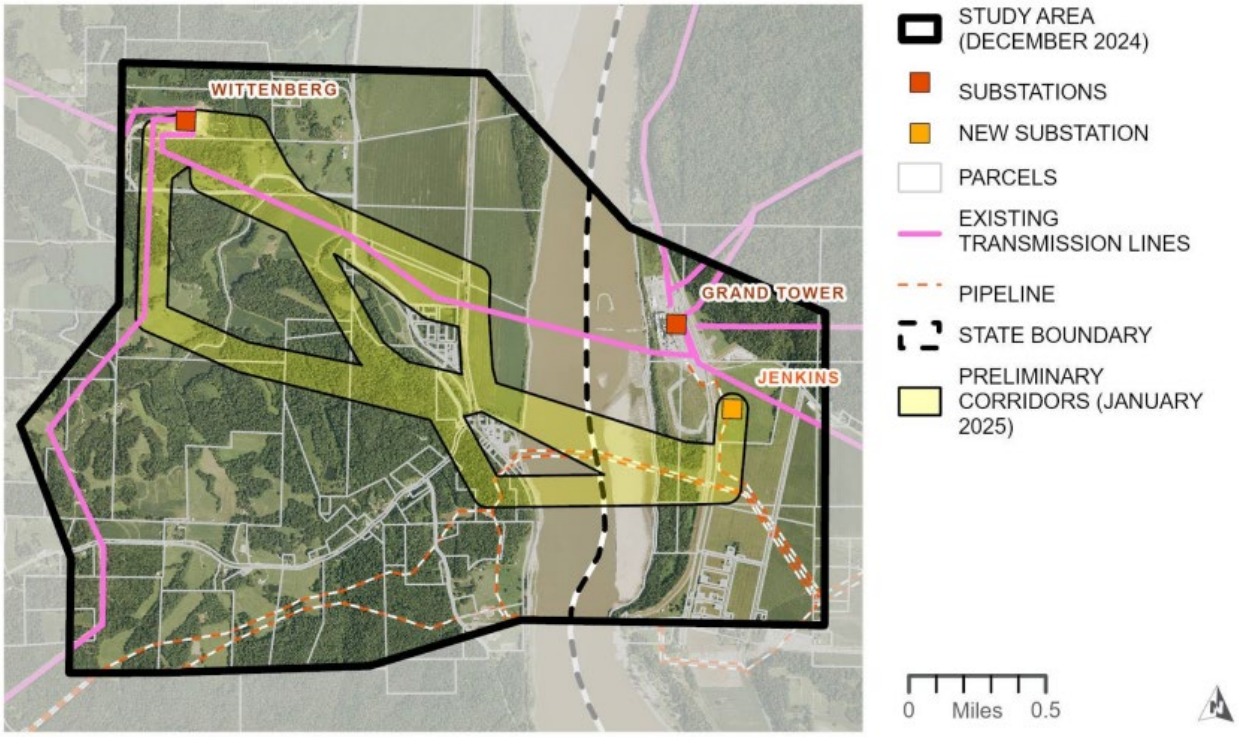
The Mississippi River crossing portion of the project had its own set of environmental sensitivities that were evaluated by the team. They looked at the habitat for any protected aquatic species of fish and mollusks, and took into consideration that the Mississippi Flyway is used by many species of migratory birds that could potentially encounter the transmission line crossing infrastructure. Additionally, due to the Mississippi River corridor being a major barge and boat passageway, the river crossing conductors must meet U.S. Coast Guard height clearances. ATXI Witness Dan Schmidt's Direct Testimony states that in order to minimize impacts to migratory birds, "the river crossing will utilize an avian-safe structure design and flight diverters as part of our corporate Avian Protection Plan."[46]

On the Missouri side of the project, the various preliminary corridors cross Brazeau Creek and one of its tributaries which drain to the Mississippi River. Crossing this water body requires permitting input from both the U.S. Corps of Engineers (Corps), and the Missouri Department. of Natural Resources (MDNR). Any creek or river crossing, including those crossings that are associated with this project, will require wetland determinations to define the extent of jurisdictional waters and abutting wetlands. Sensitivities to any of ATXI's proposed route placements would be evaluated to minimize the number of structures that would be required to be constructed in any jurisdictional areas regulated by the Corps.

Statutory requirements accompanied all of the preliminary routing corridors to one degree or another. One of the benefits of identifying sensitivities and opportunities is that potential statutory requirements of each routing corridor quickly become obvious, which allows technical guidelines to come into play, allowing their various pros and cons to be evaluated in conjunction with all of the other design considerations that were looked into in order to arrive at

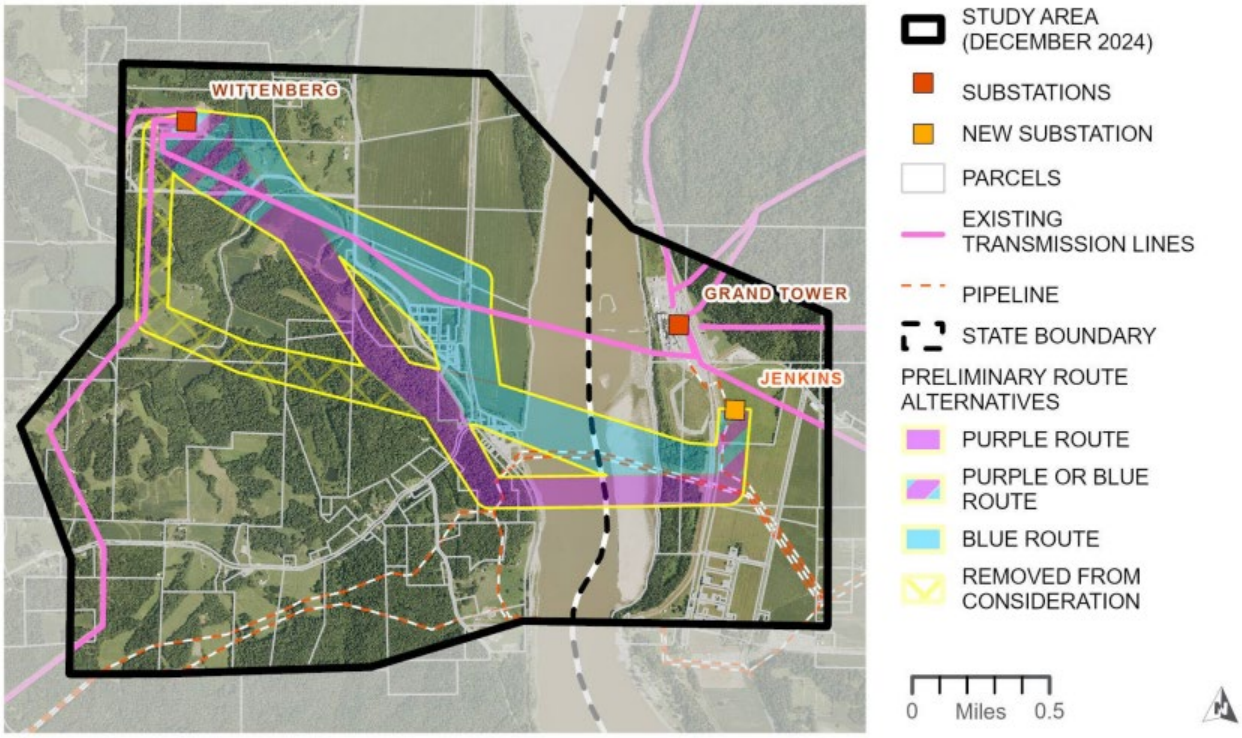
[46] See Case No. EA-2025-0222, ATXI Witness Dan Schmidt's Direct Testimony, pg. 15, lines 5 – 15.

recommendations of the most cost effective, preferred route. Below are the preliminary corridors (shaded in yellow) that the routing team identified within the entire study area. The legend to the right shows existing transmission lines. It is worth noting that the existing transmission line on the western edge (left side) of the aerial is a portion of the recently constructed Limestone Ridge project that ATXI and HDR teamed up on for development.



The following aerial of the study area and accompanying linework and legend shows what the routing team termed Preliminary Route Alternatives (PRA's), which reflected the progression of their evaluation process as the various site sensitivities and opportunities were assessed for the three potential corridors. The corridor with the yellow hatching was one that was eliminated from further consideration due to sensitivities as well as the routing team's incorporation of suggestions and comments received from the public at one of the Open Houses. Compared to the remaining two potential corridors, the rejected corridor was clearly not an optimal route to proceed with any

further. The remaining potential corridors were hatched and labeled, "blue route" and "purple route", and near the existing Wittenberg substation, they were merged into the "blue or purple route".

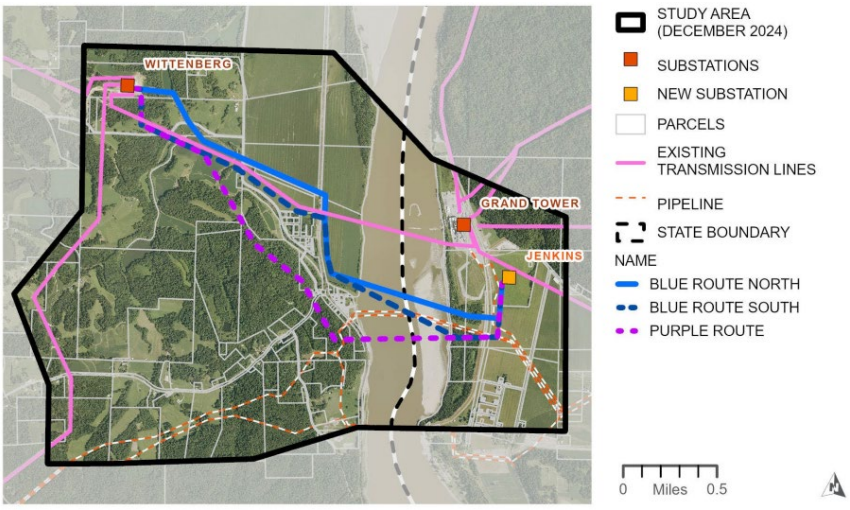


Below are excerpts, Figures, and Tables from the Routing Study provided by ATXI Witness Dan Schmidt as Schedule DS-01 to his Direct Testimony. The description and summary provided in the Routing Study features the team's efforts to arrive at the final proposed route.[47]

During the stakeholder engagement, additional sensitivities and engineering challenges were discovered along the Purple Alternative especially in the area where the route crosses the ridge top to the southeast to cross south of the existing pipelines. The Purple Route alternative is longer, is closer to more homes and farmsteads and has a greater impact on forested areas.

[47] The entire Routing Study is located in Case No. 2025-0222, ATXI Witness Dan Schmidt's Schedule DS-01.

The Blue Preliminary Route Alternative included an opportunity to follow the north or south side of the existing 138kV Transmission line. The Blue 2 Route has less agricultural impacts than Blue 1 follows the existing transmission line longer, and it crosses the former Frogtown site, which was suggested by several landowners in that area.



The Final Proposed Route is a combination of the two Blue routes and a revised routing through Frogtown that will minimize impacts on agricultural lands while maximizing following existing transmission lines. The anchor structure in Illinois was shifted south to allow for more efficient and economical engineering design. The Final Proposed Route best minimized potential impacts to Sensitivities, took advantage of Opportunities, and adhered to Technical Guidelines and Statutory Requirements. Figures 6 and 7 depict the Final Proposed Route.

Figure 6. Final Proposed Route

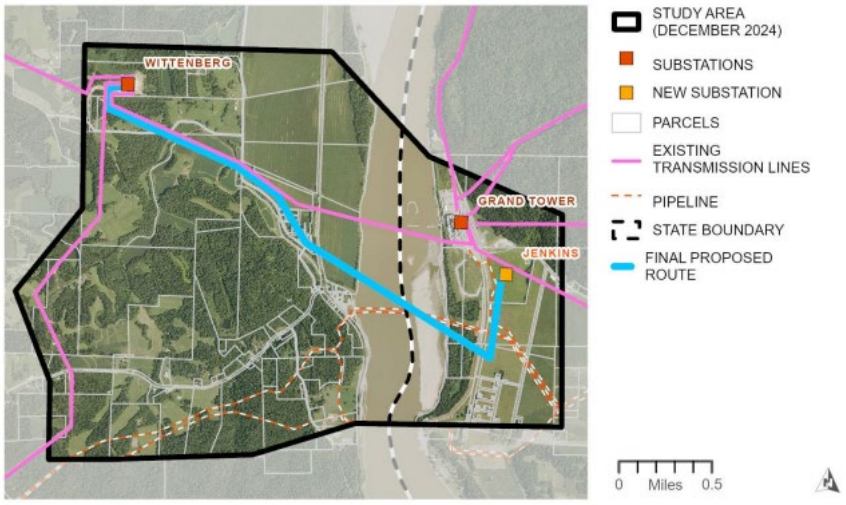


Figure 7. Proposed Route out of Wittenberg Substation

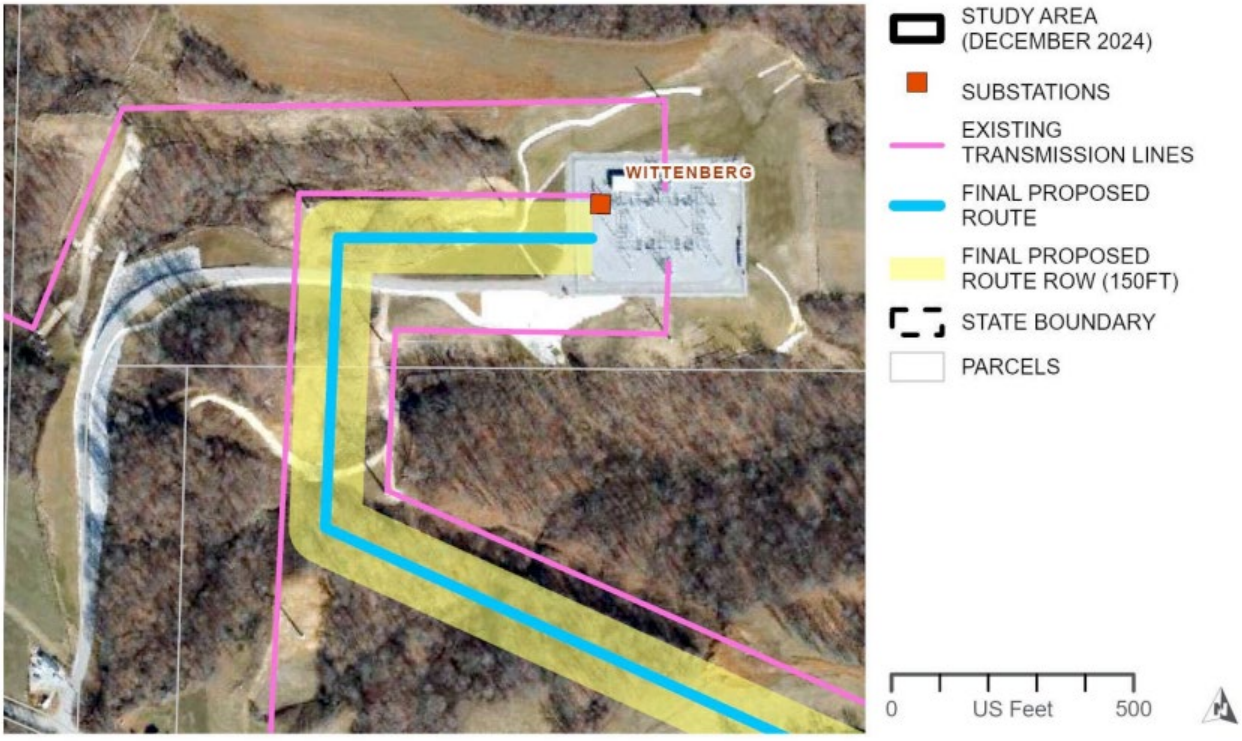


Table 4 lists a summary of the engineering and construction factors for the Proposed Route. The total length of the proposed route in Missouri is 2.2 miles of a total project length of 3.2 miles. The ROW width required for the Project is 150 feet. Generally, where the Proposed Route parallels

existing infrastructure, the new ROW will be adjacent to the existing ROW. Table 11 provides a summary of all the various components which were evaluated for the Routing Study pertaining to the final proposed route.

Routing Study Table 4 – Engineering & Construction Factors of the GTX Project

Routing Criterion	Measure (unit)	Proposed Route		Proposed Route (Missouri Only)
Length	Miles	3.2		2.2
Angle Structures	Light (1-15 deg.)	(count)	1	1
	Medium (15-30 deg.)		2	2
	Light Heavy (30-60 deg.)		0	0
	Heavy (>60 deg.)		6	2
Steep Slopes	Length Crossing Slopes > 25 deg.	(mile)	0.5	0.5
Infrastructure Crossings	Pipeline	(count)	5	0
	Railroad		1	1
	Road		5	4
	Transmission Line		0	0

Routing Study Table 11 – Overall GTX Proposed Route Summary

Criteria Type	Routing Criterion	Measure (unit)		Proposed Route	Proposed Route (Missouri Only)
Engineering and Construction	Length	Miles		3.2	2.2
	Angle Structures	Light (1-15 deg.)	(count)	1	1
		Medium (15-30 deg.)		2	2
		Light Heavy (30-60 deg.)		0	0
		Heavy (>60 deg.)		6	2
	Steep Slopes	Length Crossing Slopes > 25 deg.	(feet)	0.5	0.5
	Infrastructure Crossings	Pipeline	(count)	5	0
		Railroad		1	0
		Road		5	4
		Transmission Line		0	0
Existing Opportunity Use	Existing ROW Paralleling	Railroad	Length Paralleled (miles)	0.0	0
		Road		0.18	0
		Pipeline		0.25	0
		Transmission Line		1.3	1.3
		Total ROW Paralleling	Length Paralleled (miles)	1.67	1.3
			Length Paralleled (percentage)	52.8%	59
	Other Opportunity Paralleling	Property Line	Length Paralleled (miles)	0	00
		Field Line		0	0
	Total Opportunity Paralleling (Road, Railroad, Property Lines, and Field Lines)		Length Paralleled (miles)	1.43	1.3
			Length Paralleled (percentage)	44%	59
	Non-Opportunity Use	Cross-Country (non-diagonal)	Length (miles)	0	0
		Cross-Country (diagonal)		1.53	0.9
Residence and Non-Residential Structures	Residences (distance interval from route centerline)	0-75'	(count)	0	0
		75-150'		0	0
		150-300'		0	0
		300-500'		0	0
		500-1,000'		6	1
	Non-Residential Structures	0-75'		0	0
	Landowners	Crossed by ROW		19	14
	Parcels			39	29
Miscellaneous Land Use Features	Religious Facilities and Cemeteries	Within ½ Mile	(count)	1	1
	Local Parks or Recreation Lands			1	1
	Mines & Quarries			0	0
Land Cover	Aquatic Environment	Area within ROW	(acreage)	10.69	6.17
	Cropland			2.43	0
	Grassland			29.9	19.65

Criteria Type	Routing Criterion	Measure (unit)		Proposed Route	Proposed Route (Missouri Only)
	Forested			4.04	3.32
	Non-Vegetative			8.47	7.56
Agriculture	USDA Classified Farmland	Prime Farmland	Area within ROW[1] (acreage)	2.67	2.67
		Prime Farmland if Drained		0	0
		Farmland of State Importance		0.13	0.13
		Total of all Farmland Classes		10.2	0.13
Resource Lands	MDC or DNR Lands	Crossed by ROW[1]	(count)	0	0
		Area Crossed by ROW[1]	(acreage)	0	0
		Within ¼ Mile of Route	(count)	0	0
Hydrology	Non-Forested Wetlands	Within ROW[1]	(acreage)	10.1	5.8
		Structures Within	(count)	0	0
	Forested Wetlands	Within ROW[1]	(acreage)	3.2	1.0
		Structures Within	(count)	0	0
	Floodplain	Within ROW[1]	(acreage)	48.2	29.4
		Structures Within	(count)	14	0
	Streams	Crossed	(count)	6	4

Conclusion on Routing Study

As shown in all the included excerpts and tables from ATXI Witness Dan Schmidt's Schedule DS-01 of the Routing Study, the routing team conducted their search for the preferred route, through a professionally rigorous, and organized process.

As detailed in the Consumer Comments section of this report, ATXI gave the public the opportunity to provide input on the route. With respect to the routing study, Staff does not oppose the route as applied for by ATXI in the CCN application.

Staff Witness: Donald Fontana, PE

Conclusion on Public Interest

In summary, based on Staff's review: 1) the Project is needed; 2) ATXI is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Project; 3) ATXI has the financial ability to undertake the Project; and 4) the Project is economically feasible. Further, based on Staff's experience with transmission CCN cases similar to the present

case, and to ensure the Project is in the public interest, Staff recommends the following conditions be imposed by Commission order:

Staff Proposed Conditions

Right-of-way Acquisition and Micro-siting:

1) Throughout the right-of-way acquisition process, ATXI will use all reasonable efforts to follow the route approved by the Commission in response to the Company's Application (depicted in ATXI Witness Dan Schmidt's Schedule DS-01, entitled "Routing Study, Grand Tower Crossing Transmission Line"). However, ATXI will be allowed to deviate from the approved depicted route(s) in two scenarios:

a. First, if surveys or testing do not necessitate a deviation, ATXI may deviate from the depicted route on a particular parcel if ATXI and each landowner on which the deviation will run agree. Either ATXI or landowner may initiate such a request to deviate.

b. Second, if ATXI determines that surveys or testing require a deviation, ATXI will negotiate in good faith with the affected landowner and if agreement can be reached, ATXI may deviate from the approved depicted route on that parcel, as agreed with the affected landowner(s).

With respect to any parcel other than the identified parcels where ATXI desires to locate the line, whether because testing or surveys necessitate acquisition of an easement on that parcel or for other reasons (e.g., a request from adjacent landowners), ATXI will negotiate in good faith with the landowner of each affected parcel over which ATXI has determined an easement is needed or desired and, if agreement is reached, may deviate from the approved depicted route by locating the line on the affected parcel(s) but will notify the Commission of the deviation and parcels affected prior to construction on that parcel.

If testing or surveys necessitate acquisition of an easement on such other parcel(s) and agreement is not reached, despite good faith negotiations, ATXI will file a request with the Commission to allow it to deviate from the approved depicted route onto the affected parcel(s) and shall, concurrently with the filing of its request with the Commission, send a copy of its request to the owner(s) of record of the affected parcel(s) via U.S. Mail, postage prepaid, as shown by the County Assessor's records in the county where the affected parcel is located, or at such other address that has been provided to ATXI by the owner(s). ATXI shall fully explain in that request why ATXI determined the change in route is needed and file supporting testimony with its request and the name(s) and addresses of the owner(s) to whom it provided a copy of its request. After Commission notice of the opportunity for a hearing on the issue of whether the change in route should be approved is given to the owner, Staff and OPC, and after an opportunity to respond, the Commission will grant or deny the request.

2) Absent a voluntary agreement for the purchase of the property rights, a transmission line shall not be located so that a residential structure currently occupied by the property owners will be removed or located in the easement, including for electrical code compliance purposes.

3) Prior to the commencement of construction on a parcel, ATXI will secure an easement, which will include a surveyed legal description showing the precise dimension, including the length and width, for the permanent transmission line easement area for each affected parcel. In addition, ATXI will track each easement grant by way of a spreadsheet that identifies each parcel by Grantor and County, and which contains the recording information for each parcel. Upon securing all necessary easements for the Project, ATXI will file a copy of the spreadsheet with the Commission, to which a map will be attached. For each parcel, the map and the spreadsheet will

include a unique indicator that allows the Commission to see where on the map that parcel is located.

4) ATXI shall follow the construction, clearing, maintenance, repair, and right-of-way practices consistent with what was proposed by the Company for the Northern Missouri Grid Transformation - Phase 2 projects.

Reporting requirements:

5) ATXI shall file with the Commission in this case a legal description of the line segments when acquisition of the necessary land rights is finalized.

6) ATXI shall file the final Joint Ownership Agreement and Joint Use Agreement with the Commission in this case within 30 days of executing the agreements.

7) ATXI shall file the specific impact, if any, of the proposed transfer of the assets to be constructed on the tax revenues of the political subdivisions in which the proposed structures, facilities, or equipment are located. The Joint Ownership Agreement, Schedule A, may satisfy this reporting condition if it additionally identifies the political subdivisions in which the proposed structures, facilities, or equipment are located.

8) ATXI shall obtain all required government approvals and permits — e.g., any applicable land disturbance permits, Missouri State Highway Commission permits, US Army Corps of Engineers permits, railway crossing permits, or State or County Floodplain Development permits — before beginning construction on the part of the Project (GTX) where the approvals and permits are required, and shall file such approvals and permits with the Commission before beginning construction or, for approvals and permits obtained less than 90 days before beginning construction, within 90 days of receipt.

9) ATXI shall file with the Commission any agreement between ATXI and the pipeline companies that have assets being crossed by the Project (GTX).

10) ATXI shall file with the Commission the annual report it files with FERC.

11) ATXI shall file any vegetation management filing made to FERC, NERC, or a regional reliability organization in EFIS as a non-case related filing.

12) ATXI shall obtain acknowledgement from Ameren Missouri that they remain bound by the following provision from the 4th Order Modifying the 2012 Report and Order in Case No. EO-2011-0128 with respect to the transmission facilities to be constructed as part of the Project (GTX):

For transmission facilities located in Ameren Missouri's certificated service territory that are constructed by an Ameren affiliate and that are subject to regional cost allocation by MISO, for ratemaking purposes in Missouri, the costs allocated to Ameren Missouri by MISO shall be adjusted by an amount equal to the difference between:

(I) The annual revenue requirement for such facilities that would have resulted if Ameren Missouri's Commission-authorized ROE and capital structure had been applied and there had been no construction work in progress (CWIP) (if applicable), or other FERC Transmission Rate Incentives, including Abandoned Plant Recovery, recovery on a current basis instead of capitalizing pre-commercial operations expenses and accelerated depreciation, applied to such facilities and

(II) The annual FERC-authorized revenue requirement for such facilities. The ratemaking treatment established in this provision will, unless otherwise agreed or ordered, continue as long as Ameren Missouri's transmission system remains under MISO's functional control.

Other:

13) ATXI shall, for all future transmission line projects in Missouri which require a CCN and also require a public meeting pursuant to 20 CSR 4240-20.045(6)(K)3, develop and maintain, using best efforts, route maps on its website(s) showing preferred and alternative routes that are known at that time and still under active consideration by the ATXI, as well as any related study areas. These maps shall include parcel boundaries and satellite or aerial imagery (which shall be the default view when there are optional base maps which may be viewed) in sufficient detail for affected landowners to locate their property. These maps shall be maintained from at least the date of any public meeting(s) held, when required, and shall display preferred and known alternative routes proposed in its application or discussed in its written testimony from the date an application is filed through the effective date of the Commission's Report and Order ruling on the subject CCN application (CCN Order) or the date ATXI discontinues development of the project, whichever occurs first. If public meetings are not required to be held, ATXI shall post maps beginning on the date it provides notice of the application to affected landowners. This condition shall be applied to all ATXI applications for a CCN filed after the Commission grants a CCN in this proceeding, should be considered independently, and any deficiencies related to this condition should not, on its own, affect the validity of a CCN granted in this proceeding.

14) ATXI shall, for all projects referenced in Condition 13, include instructions for accessing the website and maps referenced in Condition 13 on all required notifications sent to affected landowners. This condition shall be applied to all ATXI applications for a CCN filed after the Commission grants a CCN in this proceeding, should be considered independently, and any deficiencies related to this condition should not, on its own, affect the validity of a CCN granted in this proceeding.

15) ATXI shall, for all projects referenced in Conditions 13 and 14, refresh its data used to comply with 20 CSR 4240-20.045(6)(K)1 that identifies the owners of land directly affected by the requested certificate, including the preferred route and any known alternative route, and entitled to receive notice of its application. The refresh of the data shall be conducted within 90 days after filing an application for a CCN to confirm the identified parcels and owners of land directly affected by the requested certificate as of the date notice of the application was issued pursuant to 20 CSR 4240-20.045(6)(K)1 and (6)(K)2. If such refresh identifies a person entitled to receive notice of the application to whom ATXI did not send such notice, ATXI shall provide a notice to such person(s) in accordance with 20 CSR 4240-20.045(6)(K)4. This condition shall be applied to all ATXI applications for a CCN filed after the Commission grants a CCN in this proceeding, should be considered independently, and any deficiencies related to this condition should not, on its own, affect the validity of a CCN granted in this proceeding.

Attachment A - Summary of Application Filing Requirements

Appendix 1 - Staff Credentials

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 138kV Transmission Line and Associated Facilities in Perry and Cape Girardeau Counties, Missouri	)	File No. EA-2025-0222

AFFIDAVIT OF DONALD A. FONTANA, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DONALD A. FONTANA, PE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation;* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Donald A. Fontana, P.E.

DONALD A. FONTANA, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10th day of September 2025.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Dianna L. Vaught

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 138kV Transmission Line and Associated Facilities in Perry and Cape Girardeau Counties, Missouri	)	File No. EA-2025-0222

AFFIDAVIT OF COTY L. KING

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW COTY L. KING, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation;* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

COTY L. KING

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 11th day of September 2025.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 138kV Transmission Line and Associated Facilities in Perry and Cape Girardeau Counties, Missouri	)	File No. EA-2025-0222

AFFIDAVIT OF JUSTIN TEVIE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JUSTIN TEVIE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation;* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JUSTIN TEVIE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10th day of September 2025.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Notary Public

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AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SEOUNG JOUN WON, PhD, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation;* and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

SEOUNG JOUN WON, PhD

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 10th day of September 2025.

DIANNA L. VAUGHT
Notary Public - Notary Seal
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