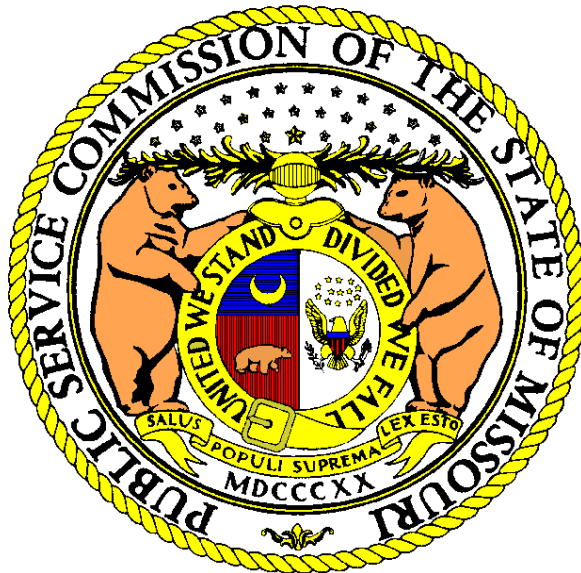


MISSOURI PUBLIC SERVICE COMMISSION

STAFF

RECOMMENDATION



AMEREN TRANSMISSION COMPANY OF ILLINOIS

CASE NO. EA-2024-0302

*Jefferson City, Missouri
December 20, 2024*

**** Denotes Confidential Information ****

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1 **STAFF RECOMMENDATION**

2 **AMEREN TRANSMISSION COMPANY OF ILLINOIS**

3 **CASE NO. EA-2024-0302**

4 **I. Executive Summary**

5 On July 16, 2024, Ameren Transmission Company of Illinois (“ATXI”) filed an
6 Application seeking a certificate of convenience and necessity (“CCN”) to construct, install,
7 operate, control, manage, and maintain Phase 1 of the Northern Missouri Grid Transformation
8 Program (“Phase 1 Projects”). ATXI is partnering with both the Missouri Joint Municipal Electric
9 Utility Commission (“MJMEUC”), and Ameren Missouri in its development of the Northern
10 Missouri Grid Transformation Program.

11 Staff reviewed ATXI’s Application and Direct Testimony based on the five factors
12 the Commission listed in *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994)
13 (“Tartan Criteria”):

- 14 • Need,
- 15 • Qualifications to own, operate, control and manage the facilities and
16 provide the service,
- 17 • Financial ability,
- 18 • Economic feasibility, and
- 19 • Promotion of the public interest.

20 In summary, based on Staff’s review: 1) the Phase 1 Project is needed; 2) ATXI is qualified
21 to construct, install, own, operate, maintain, and otherwise control and manage the Phase 1 Project;
22 3) ATXI has the financial ability to undertake the Phase 1 Project; 4) the Phase 1 Project is
23 economically feasible; and 5) the Phase 1 Project is in the public interest with the conditions
24 recommended by Staff.

1 Staff’s recommended conditions are presented in the public interest section of this report
2 and cover the following topics:

- 3 • Right-of-way acquisition process and micro-siting;
- 4 • Reporting requirements; and
- 5 • Future landowner communications.

6 **II. Application Summary**

7 The Northern Missouri Grid Transformation Program is Missouri's jurisdictional portion
8 of the Midcontinent Independent System Operator’s (“MISO”) Long-Range Transmission
9 Planning (“LRTP”) Tranche 1 Portfolio. The LRTP Tranche 1 Portfolio consists of 18 Multi-Value
10 Projects (“MVPs”) across the MISO footprint. Of the 18 MVPs, 3 MVPs include footprints
11 in Missouri:

- 12 a) Orient – Denny – Fairport
- 13 b) Denny – Zachary – Thomas Hill – Maywood
- 14 c) Maywood - Meredosia

15 The Fairport to Denny to Iowa/Missouri Border (“FDIM”) Project refers to the Missouri
16 portion of the Orient – Denny - Fairport route. The Maywood to Mississippi River Crossing Project
17 (“MMRX”) Project refers to the Missouri portion of the Maywood - Meredosia route. MISO
18 competitively bid the FDIM and MMRX Projects, ultimately selecting ATXI as the developer for
19 both Projects. ATXI has applied for two CCNs related to the Northern Missouri Grid
20 Transformation Program.¹

21 The subject of this CCN application is referred to by ATXI’s application as the Phase 1
22 Projects. The Phase 1 Projects consists of the FDIM and MMRX Projects. More specifically, the

¹ File No. EA-2024-0302 regarding Phase 1, and File No. EA-2025-0087 for Phase 2.

1 FDIM Project includes construction of 44 miles of new 345 kilovolt (kV) transmission line in the
2 northwest Missouri counties of Worth, Gentry, and Dekalb counties and a new ATXI substation,
3 the Denny substation.² The MMRX Project includes construction of nine (9) miles of new 345 kV
4 transmission line in northeast Missouri and upgrades to ATXI’s existing Maywood Substation.
5 ATXI is seeking approval for the Phase 2 Projects in EA-2025-0087.

6 In addition to the granting of a CCN for the Phase 1 Projects, ATXI is seeking permission
7 to transfer a 49% undivided interest in the FDIM Project to MJMEUC. The transfer of a minority
8 interest to MJMEUC lowers the FDIM Project cost. Both ATXI’s and MJMEUC’s investment in
9 the Project will be reflected in their respective Federal Energy Regulatory Commission (“FERC”)
10 jurisdictional formula rates. FERC formula rates are used to assess transmission charges to load in
11 the Ameren Missouri Transmission Pricing Zone.

12 ATXI and MJMEUC have executed a Joint Ownership Agreement (“JOA”). As a part of
13 the JOA, a list of specific assets to be transferred to MJEUC will be developed. Staff recommends
14 ATXI file the final copy as a compliance condition.³

15 With the transfer of interest in certain assets, MJMEUC will be a minority owner; however,
16 ATXI will operate the assets. Additionally, MJMEUC will cover 49% of the ongoing operations
17 and maintenance costs associated with assets in which it has an interest.

18 ATXI’s partnership with Ameren Missouri relates to rebuilding approximately six (6) miles
19 of 161 kV line to a double circuit 161 kV/ 345 kV line.⁴ This portion of the Phase 1 Project is
20 located along the Palmyra to Mississippi River Crossing line segment. Ameren Missouri will

² 20 CSR 4240-20.045(6)(A) requires a description of the proposed route or site of construction. Application Appendix E depicts the routes of the FDIM and MMRX routes. Confidential Schedule GE-D1 attached to ATXI witness Mr. Gregory Eddings’ direct testimony depicts the new Denny Substation.

³ ATXI has agreed to this condition in paragraph 47 of the Application.

⁴ Direct Testimony of Tracy Dencker Page 6, Lines 5-6.

1 remove its existing support structures, conductor, and hardware. ATXI will construct new steel
2 monopole structures and the new 345 kV circuit. Ameren Missouri will then replace its conductor
3 onto the ATXI-owned structures. Ameren Missouri will be reimbursed by ATXI for the removal
4 and installation costs. ATXI will own, operate, and maintain the support structures and the 345 kV
5 circuit while Ameren Missouri will continue to own, operate, and maintain the 161 kV line. ATXI
6 and Ameren Missouri will enter into a Joint Use Agreement (“JUA”) detailing each entity’s
7 responsibilities regarding construction, ownership, operation, and maintenance. Staff recommends
8 the Commission order ATXI to file the final JUA with the Commission within 30 days of executing
9 the agreement.

10 ATXI has included within its Application and Direct Testimony the minimum filing
11 requirements of Commission Rules 20 CSR 4240-2.060, 20 CSR 4240-20.045(6), and 20 CSR
12 4240-10.0105. Attachment A includes the filing requirements and Staff’s review.

13 Staff notes concerns with lack of notice to landowners on known alternative routes in the
14 public interest section of this report and is recommending another local public hearing.
15 Specifically, Staff recommends the Commission grant the CCN, subject to another virtual local
16 public hearing for those landowners in the re-route area of DO-27 to DO-28 (generally between
17 the corner of Highway N and Kent Lane to County Road 249), providing an opportunity to those
18 landowners to express their concerns, if any, on the route.

19 Staff further recommends a number of reporting requirements which are outlined in the
20 conclusion.

21 *Staff Witness: Claire M. Eubanks, PE*

1 **III. Five Tartan Criteria**

2 **Whether there is a need for the facilities and service**

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

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

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

9 The primary purpose of the FDIM and MMRX Projects is to complete Phase 1 of Missouri's
10 jurisdictional portion of MISO's LRTP Tranche 1 Portfolio. MISO's LRTP Tranche 1 Portfolio
11 aims to mitigate grid issues across the MISO region resulting from different ranges of economic,
12 policy, and technological changes which are anticipated to occur in the next 20 years. The LRTP
13 Tranche 1 Portfolio was developed in collaboration with Transmission Owners ("TOs") and MISO
14 stakeholders with four main objectives: "ensure a reliable system; provide cost-effective
15 solutions that allow the future resource fleet to serve load across MISO's footprint; enable access
16 to lower-cost energy; and allow more flexibility in the fuel mix for customer choice."⁵

17 Although the MISO LRTP Tranche 1 Portfolio aims to mitigate forecasted grid issues
18 across the entire MISO region. ATXI stated in their application that the LRTP Tranche 1 Portfolio
19 would benefit Missouri by resolving forecasted thermal issues located within Missouri. Once
20 completed, the LRTP Tranche 1 would increase transfer levels into and out of Missouri, as well as
21 improve grid resiliency during extreme weather events.⁶

⁵ EA-2024-0302 Application, Page 5, Paragraph 12.

⁶ Direct Testimony of Justin Davies, Page 20-23.

1 **Background**

2 MISO is an organization that manages the electrical grid of a region including parts
3 of 15 U.S. states and the Canadian province of Manitoba. The MISO region includes a portion
4 of Missouri.

5 Upon noticing an increase in renewable energy being integrated into the grid, MISO
6 conducted a Renewable Integration Impact Assessment (RIIA) in 2018. This assessment held a
7 focus to “evaluate the impact of increasing amounts of wind and solar” on the grid, specifically
8 system-wide. The study focused on being “policy and pace agnostic,”⁷ meaning it sought to
9 analyze the impact on the grid regardless of policy changes or the pace of renewable energy growth
10 since MISO was unsure at the time what future policies would be and what the pace of the
11 renewable energy integration would be.⁸ MISO’s assessment discovered that system-wide
12 renewable integration levels beyond 30%, with incremental transmission expansion, would cause
13 “significant grid issues, including thermal overload issues on the Ameren system in Missouri,
14 which degrade system performance.” But, the RIIA also found that “penetration levels of even
15 50% or higher could be reliably achieved if MISO, TOs, and the states work together to develop
16 and implement grid solutions that will support that level of renewables integration.”⁹

17 This led MISO to begin collaborating with TOs and states to develop grid solutions called
18 Multi-Value Projects (“MVPs”). MVPs are regional transmission projects with the goal for each
19 project to “provide benefits in excess of costs throughout the MISO footprint or subregions with

⁷ [20210303 RIIA Workshop Presentation](#), slide #4.

⁸ [cdn.misoenergy.org/20210303 RIIA Workshop Recording544222.mp4](#), 8:50-9:50.

⁹ EA-2024-0302 Application, Page 4, Paragraph 11.

1 project expenses being broadly shared.”¹⁰ But in order to do this, MISO needed a way to
2 estimate how the grid would behave in the future so it developed what it calls “Series” which are
3 groups of “forward-looking planning scenarios that provide outlooks to bridge what is known
4 about the system today to what it could be in the future”, which it called “Futures.”¹¹ MISO
5 collaborated with stakeholders to develop a cohort of three future planning scenarios, which are
6 now referred to as the Series 1 Futures. These three future planning scenarios were named
7 Future 1, Future 2, and Future 3. These Future scenarios “establish different ranges of economic,
8 policy, and technological possibilities – such as load growth, electrification, carbon policy,
9 generator retirements, renewable energy levels, natural gas price, and generation capital cost –
10 over a twenty-year period.”¹²

11 Series 1 “was developed over an 18-month period beginning in mid-2019 through the end
12 of 2020 and was the foundation of the LRTP Tranche 1 analysis, used to justify a \$10.3 billion
13 portfolio of new transmission investments.”¹³ Three of the developed MVPs have parts that
14 are within Missouri’s jurisdiction, MVP 9, 10, and 11. The Orient – Denny – Fairport Project
15 (MVP 9) crosses the border of Missouri into Iowa and the Maywood – Meredosia Project
16 (MVP 11) crosses the border of Missouri into Illinois while the Denny – Zachary – Thomas Hill –
17 Maywood Project (MVP 10) is wholly within Missouri. All three of these Projects are meant to
18 connect to one another. The Missouri jurisdictional portions of MVP 9 and MVP 11 are the subject
19 of this application which are named the FDIM and MMRX Projects for Missouri’s purposes.

¹⁰ <https://www.misoenergy.org/planning/multi-value-projects-mvps/#t=10&p=0&s=Updated&sd=desc>, accessed 12/13/24.

¹¹ [MISO Futures One Pager538214.pdf](#), Page 1.

¹² <https://cdn.misoenergy.org/MISO%20Futures%20Summary%20Presentation538220.pdf>, Slide #2.

¹³ Series 1A Futures Report, Page 2.

1 A two-phase approach is being used to construct Missouri’s jurisdictional portions of
2 MVP 9, 10, and 11. Phase 1 consists of the FDIM and MMRX Projects. Phase 2 will consist of
3 the Denny – Zachary – Thomas Hill – Maywood (“DZTM”) Project. MISO awarded the Phase 2
4 Project to ATXI and MJMEUC on April 2, 2024, and a separate CCN has been requested
5 under Case No. EA-2025-0087.¹⁴ In order for Missouri to receive the full anticipated benefits
6 from MISO’s LRTP Tranche 1 Portfolio, both Phase 1 and Phase 2 will need to be approved by
7 the Commission.

8 **Resolve Forecasted Thermal Issues**

9 Forecasted thermal issues were discovered by studying the grid using the Future 1 planning
10 scenario which is the most modest planning scenario in Series 1.¹⁵ Future 1 assumes load growth
11 over the 20-year period to be consistent with current trends and assumes that the footprint will
12 develop in line with “100% of utility IRPs and 85% of utility announcements, state mandates,
13 goals, or preferences.”¹⁶ Studying Future 1 would display issues that are anticipated to occur
14 within the MISO region if the Tranche 1 portfolio of projects are not constructed.

15 MISO identified eight thermal issues that are anticipated to occur within Missouri based
16 on the Future 1 scenario. Thermal issues, in reference to transmission elements, refers to situations
17 where transmission lines or equipment become overloaded due to high levels of electrical current
18 and become overheated. This can lead to reduced efficiency and failures.

19 Figure 1 displays transmission elements forecasted to have thermal issues that were
20 identified by MISO which the LRTP Tranche 1 portfolio relieved. The element was considered

¹⁴ EA-2024-0302 Application, Page 9, Footnote 2.

¹⁵ MTEP21. Page 21.

¹⁶ MISO Futures Summary Presentation.

1 relieved “if its worst pre-project loading was greater than 95% of its monitored Emergency rating,
2 its worst post project loading was less than 100% of its monitored Emergency rating, and the worst
3 loading decreased by greater than 5% following the addition of the project.”¹⁷ The elements along
4 with their reduction in loading are displayed in the table below:

5 Figure 1 Transmission elements with forecasted thermal issues
6 that the Tranche 1 Projects would resolve ¹⁸

Monitored Facility	Area	% Loading	
		Base + West LRTP*	+ IA to MI Project + MO Projects
Overton 345/161 kV Transformer	AMMO	109	97
Overton – Sibley 345 kV Ckt. 1	AMMO	102	88
Huntsdale – Overton 1 161 kV Ckt. 1	AMMO	101	91
California 161 kV Bus 1 – Overton 2 161 kV Ckt. 1	AMMO	98	88
Huntsdale – Perche Creek 161 kV Ckt. 1	CWLD	97	87
McBaine Bus #2 – McBaine Tap 161 kV Ckt. 1	AMMO	97	85
Maurer Lake 161 kV Bus 1 – Carrollton 161 kV Ckt. 1	AMMO	96	70
California 161 kV Bus	AMMO	95	85

8
9 **Increase Transfer Levels Across MISOs Region**

10 In addition to resolving forecasted thermal issues, MISO stated that the LRTP Tranche 1
11 Portfolio can “increase transfer levels from East-West/West-East.”¹⁹ MISO is specifically
12 speaking of the transfer levels across the MISO region and not exclusively Missouri. Generally,
13 the benefits of increasing the transfer levels include:

- 14 • allowing the grid to better handle the increase in renewable energy generation since
15 many renewable energy sources are variable and intermittent in nature,

¹⁷ MTEP21, Page 44.

¹⁸ Direct Testimony of Justin Davies, Page 20, Lines 10-11.

¹⁹ MTEP21 Page 46.

- 1 • allowing the grid to transfer electricity more efficiently by reducing congestion
- 2 which in turn optimizes the usefulness of the energy generated,
- 3 • allowing access to other energy generation sources across the region, and
- 4 • it can help reduce the risk of power outages due to the challenges associated with
- 5 balancing the supply and demand of electricity using limited transfer capability.

6 In addition to the Tranche 1 Projects located in Missouri, there are also Tranche 1 Projects
7 that will span from Iowa to Michigan called the East Central Corridor Solution. Using the Future 1
8 scenario, MISO determined that the introduction of the East Central Corridor Solution could
9 increase the MISO region East-West/West-East transfer levels from 1,640 megawatts (MW) to
10 3,773 MW. The addition of the Missouri projects would further increase the transfer level from
11 3,773 MW to 6,000 MW.²⁰ This displays that the Missouri jurisdictional projects could add a
12 significant portion to the MISO region's transfer capacity that it would otherwise lack with the
13 absence of the Missouri jurisdictional projects.

14 The Commission should be made aware that the projected transfer level of 6,000 MW is
15 only obtainable with the completion of the East Central Corridor Solution and the completion of
16 both Phase 1 (EA-2024-0302) and Phase 2 of the Missouri jurisdictional projects (EA-2025-0087).

17 **Improve Grid Resiliency During Extreme Whether Events**

18 Along with the benefit of increased transfer levels, ATXI states that the LRTP Tranche 1
19 Portfolio can improve the region's ability to respond to extreme weather events.²¹ Although
20 weather events were not initially one of the major reasons for constructing the LRTP Tranche 1
21 Portfolio of projects, the increase in transmission lines does provide additional routes of energy

²⁰ MTEP21 Page 46.

²¹ Direct Testimony of Justin Davies, Page. 23.

1 transfer in the case of a severe storm. MISO emphasized this need in MISO’s “The February Arctic
2 Event, February 14-18, 2021”, report saying “[t]he challenges faced during this extreme weather
3 event, including transmission emergencies and generator outages, are a stark reminder of the need
4 to continue transforming to ensure the MISO Region is ready for the current and future challenges
5 facing the industry.”²²

6 **Other Projects**

7 The Commission approved Invenergy's Grain Belt Express Project (“GBX”) and this
8 project was not included in MISO’s analysis when it developed the LRTP Tranche 1 Portfolio.
9 Invenergy filed a complaint under FERC Docket No. EL22-83-000 claiming that the GBX Project
10 should have been included in MISOs base assumptions for the LRTP Tranche 1 Portfolio.

11 In response to Invenergy’s complaint, MISO stated that the GBX Project was excluded
12 from MISO’s analysis because the GBX Project did not meet the requirements set forth in MISO’s
13 Tariff in order to be included in the base case assumptions for the LRTP Tranche 1 Portfolio.
14 MISO stated that “[t]hese requirements ensure that only MHVDC proposals that attained a
15 sufficient level of certainty are included in MISO’s models to avoid distortions in the MTEP²³
16 analyses and cost shifts to MISO loads.”²⁴

17 MISO completed its LRTP Tranche 1 portfolio and it was approved by the MISO board
18 prior to the GBX Project obtaining the necessary requirements to be included in MISO’s base
19 assumptions for the LRTP Tranche 1 Portfolio.²⁵ In addition to the LRTP Tranche 1 Portfolio,
20 MISO stated that “key portions of the LRTP Tranche 2 process had already been concluded by

²² The February arctic event, [2021 Arctic Event Report554429.pdf](#).

²³ MISO Transmission Expansion Planning (“MTEP”).

²⁴ FERC 20240423-5030 EL22-83-000, Page 3.

²⁵ FERC 20240423-5030 EL22-83-000, Pages 3-4.

1 the time the GBX TCA (Transmission Connection Agreement) was accepted by FERC in
2 February 2024. MISO has no ability to go backwards in the LRTP planning process and make
3 changes to the initial LRTP Tranche 2 models to accommodate the changing status of the GBX
4 Line Project without significant rework and delay, which will affect other stakeholders.”²⁶
5 However, MISO plans on creating a sensitivity analysis to determine the impact of the GBX
6 Project on the Tranche 2 portfolio and will include the GBX Project moving forward.²⁷

7 **Conclusion**

8 In conclusion, the FDIM and MMRX Projects are needed to complete Phase 1 of the
9 Missouri jurisdictional portions of MISO’s LRTP Tranche 1 Portfolio. MISO’s LRTP Tranche 1
10 Portfolio is an initiative aimed at benefiting the entire MISO region which includes a portion of
11 Missouri. MISO has shown through extensive study that the Tranche 1 portfolio, including the
12 FDIM and MMRX Projects, will resolve forecasted thermal issues in Missouri, increase transfer
13 levels across MISO’s region, and improve grid resiliency during extreme weather events.

14 The Commission should be made aware that the presence of the LRTP Tranche 1 Portfolio
15 Projects in Missouri could influence the anticipated usefulness of the GBX Project from Missouri’s
16 perspective and alternatively the presence of the GBX Project could influence the anticipated
17 usefulness, from Missouri’s perspective, of the LRTP Tranche 1 Portfolio Projects located within
18 Missouri’s jurisdiction. However, no such analysis has been done, and, the magnitude of the
19 influence is currently unknown.

20 For these reasons, Staff recommends the Commission find that the projects are effectively
21 a necessity because the lack of the service is such an inconvenience.

22 *Staff Witness: Malachi Bowman*

²⁶ FERC 20240423-5030 EL22-83-000, Page 13 of Doner Affidavit.

²⁷ FERC 20240423-5030 EL22-83-000, Page 16 of Doner Affidavit.

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

ATXI, an affiliate of Ameren Corporation (“Ameren Corp.”), has been in business for over fourteen years and has previously been granted CCNs from this Commission for several projects dating back to 2015. ATXI developed several MVPs in Missouri and Illinois, including the Mark Twain, Illinois Rivers, and Spoon River Projects. Additionally, ATXI collaborated with Wabash Valley on the Limestone Ridge Project. ATXI plans to utilize Ameren Services to manage and supervise the Phase 1 Projects. ATXI witness Tracy Dencker provides additional detail regarding the management and construction of the project on page 24 through page 34 of her direct testimony.

ATXI will also utilize the operations and maintenance services of Ameren Services when the Project is complete. Ameren Services employs system operators certified by the North American Electric Reliability Corporation (“NERC”). Ameren Services routinely patrols and coordinates scheduled maintenance. Additionally, in the event of an unplanned outage, Ameren Services will follow its documented procedures.²⁸ ** [REDACTED]

[REDACTED] **²⁹

Further, Staff reviewed the internal standards of Ameren Services related to patrol and repair of its assets, vegetation management, and unplanned outages.³⁰ These standards and processes were provided in response to Staff Data Request No. 0008.

Staff concludes ATXI is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Project.

Staff Witness: Claire M. Eubanks, PE

²⁸ Direct Testimony of Tracy Dencker, Pages 33.

²⁹ Response to Staff Data Request No. 0008, Attachment 15.

³⁰ Attachments provided in response to Staff’s Data Request No. 0008.

1 **Whether the applicant has the financial ability for the undertaking**

2 Does the applicant have the financial ability to provide the service?

3 Yes. ATXI is a private company wholly owned by Ameren Corp. Considering ATXI
4 and Ameren Corp’s financial capacity, the Applicant has the financial ability to construct, acquire,
5 and operate certain transmission assets as part of its Northern Missouri Grid Transformation
6 Program (“Program”).

7 ATXI estimates the total cost to construct the Program of \$611.1 million, including the
8 total cost to construct just the Phase 1 Projects of \$120.5 million.³¹ ATXI will initially fund the
9 entire Program’s estimated cost and will transfer a 49% interest in the FDIM Project and a 49%
10 interest in the competitive portion of the DZTM Project to MJMEUC, leaving 51% to ultimately
11 be funded by ATXI long-term, or \$397.9 million across all three projects (collectively, the
12 “Projects”) prior to being placed in-service.³²

13 ATXI is targeting an in-service date for all Phase 1 facilities by June 2028, and for all
14 Phase 2 facilities by December 2029.³³ The total expected cost of the Program that ATXI will
15 need to finance during construction is approximately \$568 million.³⁴ However, ATXI’s long-term
16 financing of the Program will be reduced to \$397.9 million once MJMEUC and FDIM ownership
17 is settled after the completion of these Projects.³⁵ During construction, ATXI will finance the
18 initial capital cash flow requirements with either available cash on hand or short-term borrowings

³¹ EA-2024-0302 Application, Page 19, Paragraph 36.

³² Direct Testimony of Greg Gudeman, Page 5, Lines 12-13.

³³ Direct Testimony of Tracy Dencker, Pages 34-35.

³⁴ Direct Testimony of Greg Gudeman, Page 6, Lines 5-6.

³⁵ Direct Testimony of Greg Gudeman, Pages 6-7.

1 under Ameren’s Utility Money Pool arrangement up to the \$300 million limit while managing the
2 targeted 60% equity ratio.³⁶

3 Over the next five years, S&P expects Ameren Corp’s elevated capital spending to amount
4 to roughly \$19.7 billion, projected through 2024, across its electric transmission and electric and
5 gas distribution businesses.³⁷ ATXI’s forecasted capital expenditures for 2024-2028 total just
6 under ** [REDACTED] **. ³⁸ S&P and Moody’s have both rated Ameren Corp. as investment grade.
7 S&P assigned Ameren Corp. a rating of “BBB+”, while Moody’s rated them as “Baa1.”³⁹
8 Furthermore, ATXI demonstrates financial strength, as evidenced by its Moody’s A2 issuer credit
9 rating, based in large part on the supportive FERC regulatory framework and the strength of
10 ATXI’s credit metrics.⁴⁰

11 Additionally, to investigate the financial impact of the Projects, Staff conducted pro forma
12 analysis using financial ratios such as Debt to Earnings before Interest, Taxes, and
13 Depreciation/Amortization (“EBITDA”) and Funds from Operations (“FFO”) to Debt. As shown
14 in Table 1, Staff found that there is no significant change in ATXI’s financial risk profile due to
15 the Projects:⁴¹

16 **Table 1. ATXI Financial Ratios⁴²**

	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
FFO / Debt (%)	**	[REDACTED]	**	**	[REDACTED]
Debt / EBITDA (x)	**	[REDACTED]	**	**	[REDACTED]
Debt / Capital (%)	**	[REDACTED]	**	**	[REDACTED]

³⁶ Direct Testimony of Greg Gudeman, Pages 9-10.

³⁷ Ameren Corporation, RatingsDirect, S&P Global Ratings. March 23, 2023.

³⁸ Staff Data Request No. 0005.1, EA-2024-0147.

³⁹ S&P Capital IQ Pro, retrieved October 1, 2024.

⁴⁰ Direct Testimony of Greg Gudeman, Pages 8-9.

⁴¹ S&P’s Ratings Services, RatingsDirect, “Criteria Methodology: Business Risk/Financial Risk Matrix Expanded”

⁴² Staff’s Data Request Nos. 0001 and 0002.

1 ATXI is a transmission-only company with a low business risk profile. ATXI has estimated
2 that the final maximum estimated costs could be approximately \$400 million.⁴³ Considering the
3 proposed cost, which is less than 3% of Ameren Corp.'s and ATXI's capital expenditure over
4 five years, and the financial impact of the Projects, it is reasonable to conclude that ATXI has
5 the financial ability to own, operate, and maintain the Projects.

6 *Staff Witness: Dr. Seoung Joun Won, PhD*

7 **Whether the proposal is economically feasible**

8 On page 15 of Dr. Todd Schatzki's direct testimony, he states that the Projects are feasible
9 because:

- 10 • FERC reviewed and approved the revenue requirement for recovery through the
11 MISO Tariff, thus providing ATXI with a means to recover the development and
12 operation costs of the Phase 1 Projects;
- 13 • ATXI has provided a plan to finance the Phase 1 Projects, demonstrated the ability
14 to finance the Phase 1 Projects, and indicated its willingness to finance the Phase 1
15 Projects;
- 16 • Phase 1 Projects lower wholesale market prices and costs of production, creating a
17 more efficient wholesale market and greater access for Missouri to renewable and
18 other energy sources from throughout the MISO footprint, in turn reducing costs
19 for electric customers in Missouri.

20 ATXI's first point is about economic feasibility, the second concerns financial ability, and
21 the third is a public interest factor of the Tartan criteria. Concerning the third factor, it is not true
22 that lower wholesale market prices reduce costs for electric customers in Missouri. As an example,
23 if market prices are lower at a time the utility is a net seller, then the company receives less off
24 system sales revenue which ultimately increases the rates a Missouri customer pays.

⁴³ Direct Testimony of Greg Gudeman, Page 10, Lines 7-9.

1 The Cambridge Dictionary defines “economic feasibility” as “the degree to which the
2 economic advantages of something to be made, done, or achieved are greater than the economic
3 costs.”⁴⁴ Feasibility studies should assess whether a proposed project or solution is financially
4 viable and cost-effective with respect to given alternative solutions. With respect to the proposed
5 Projects, much of this analysis was completed by MISO.

6 The proposed Projects have been approved as part of the 2021 MISO Transmission
7 Expansion Plan. Figure 2 below shows the benefit cost ratio of the MISO Tranche 1 Projects,
8 which includes ATXI’s proposed Projects. Missouri is Zone 5, which includes Ameren Missouri
9 and Columbia Water and Light, and has a Benefit/Cost ratio of 3.0 to 4.2.⁴⁵

10 **Figure 2**⁴⁶

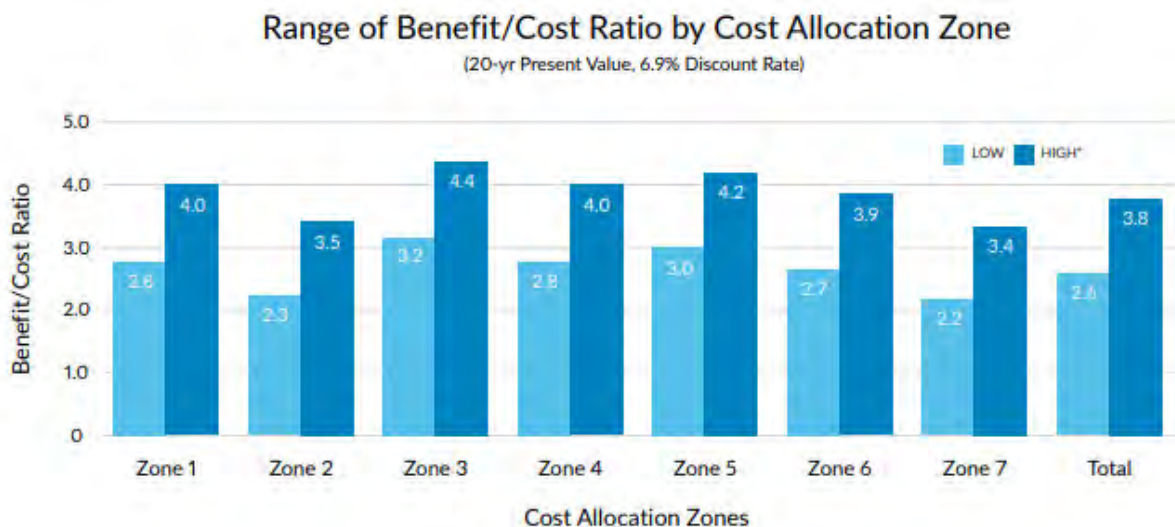


Figure 3: Benefits from the LRTP Tranche 1 portfolio exceed costs in every Midwest Subregion cost allocation zone

* The low and high range of benefit/cost ratios by Cost Allocation Zone are driven by changing two assumptions in the 20-year present value analysis: 1) increasing the Value of Lost Load (VOLL) from \$3,500/MWh (low) to \$23,000/MWh (high); and 2) increasing the price of carbon from \$12.55/ton (low) to \$47.80/ton (high).

11 ⁴⁴ <https://dictionary.cambridge.org/us/dictionary/english/economic-feasibility> (21NOV2024).

⁴⁵ Note the footnote on Figure 2.

⁴⁶ MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Executive Summary, Figure 3, Page 4. [MTEP21 Addendum-LRTP Tranche 1 Report with Executive Summary625790.pdf](#) (25NOV2024).

1 According to MISO’s MTEP21 Report Addendum, the quantified benefits include:
2 Congestion and Fuel Savings, Avoided Capital Cost of Local Resources, Avoided Transmission
3 Investment, Resource Adequacy Savings, Avoided Risk of Load Shedding, and Decarbonization.⁴⁷

4 Generally, Staff lacks the ability to challenge the analysis of MISO, but is aware that other
5 entities have.

6 In FERC Docket No. EL22-83-000, Invenergy Transmission LLC, the owner of the Grain
7 Belt Express Project, filed a complaint against MISO alleging that the MISO LRTP results used
8 to determine the Tranche 1 Projects were inaccurate and inefficient.⁴⁸ Invenergy further stated
9 that the failure to account for its project “has resulted in harm to ratepayers and merchant
10 transmission projects, as well as a portfolio of projects that individually do not meet the required
11 cost-benefit threshold outlined in the tariff.”⁴⁹ Invenergy believes that the Tranche 1 Projects
12 are potentially duplicative of its own project and “that MISO’s 20-year projections of benefits
13 will be impacted by the existence of merchant transmission that will be operational before any of
14 those Tranche 1 Projects are completed.”⁵⁰ However, as Invenergy has not sought intervention in
15 this case, Staff does not have information about Invenergy’s analysis on ATXI’s proposed Projects
16 in particular.

17 Other entities have also expressed concerns about the stated benefits of the Tranche 1
18 Projects. Steve Leovy stated “MISO’s methodology suffers from flaws that render its benefit

⁴⁷ MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Executive Summary, Page 3. [MTEP21 Addendum-LRTP Tranche 1 Report with Executive Summary625790.pdf](#) (25NOV2024).

⁴⁸ Complaint Requesting Fast Track Processing to Fix MISO’s Transmission Expansion Planning Processes. 8/8/2022 FERC Docket EL22-83-000. Page 2 of 47.

⁴⁹ Motion for Leave to Answer and Answer of Invenergy Transmission LLC. 5/24/2024 FERC Docket EL22-83-000. Page. 1.

⁵⁰ Complaint Requesting Fast Track Processing to Fix MISO’s Transmission Expansion Planning Processes. FERC Docket EL22-83-000. Pages 31-32 of 47.

1 estimates unreliable,” but still stated that the “Tranche 1 portfolio appears to be a reasonable first
2 step at addressing the need.”⁵¹ Jeff Cook stated that, “The benefit cost ratios as currently calculated
3 by MISO for the LRTP [Long Range Transmission Planning] Tranche 1 projects are overstated”
4 and that “without a comparison to [non-transmission] alternatives, it is unclear if the projects in
5 Tranche 1 are cost-effective solutions.”⁵² James Dauphinais stated, “Our major concern with
6 MISO’s presentation of LRTP Tranche 1 Portfolio Benefits in the Draft Addendum is that MISO’s
7 methodology contains three serious flaws that we believe overstate the forecasted benefit of the
8 LRTP Tranche 1 transmission projects.”⁵³ However, he also stated that, “full correction of these
9 three flaws may not cause the overall 20-year net present value benefit to cost ratio for LRTP
10 Tranche 1 to fall below 1.0 for the overall MISO North/Central Subregion.”⁵⁴ There is other
11 feedback that is more supportive of MISO’s method, including by Ameren. However, Mr.
12 Dauphinais’s concerns about MISO’s methodology problems leading to future proposed LRTP
13 Tranches being overestimated is also backed up by MISO’s Independent Market Monitor. MISO’s
14 Independent Market Monitor has also expressed concern that several of Tranche 2’s benefits are
15 overstated.⁵⁵

⁵¹ DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report. Mr. Leovy on behalf of Municipals, Cooperatives, and Transmission Dependent Utilities. [DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report](#). (26NOV2024).

⁵² DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report. Mr. Cook on behalf of Iowa Office of Consumer Advocate. [DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report](#). (26NOV2024).

⁵³ DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report. Mr. Dauphinais on behalf of Association of Businesses Advocating Tariff Equity, Coalition of MISO Transmission Customers, Illinois Industrial Energy Consumers, Louisiana Energy Users Group, Midwest Industrial Customers, NIPSCO Large Customer Group, and Texas Industrial Energy Consumers. [DRAFT LRTP Tranche 1 Portfolio Report - Addendum to MTEP21 Report](#). (26NOV2024).

⁵⁴ Ibid.

⁵⁵ MISO IMM Comments on LRTP Tranche 2 Benefit Metrics. May 29, 2024. https://cdn.misoenergy.org/20240529_LRTP_Workshop_Item_02_IMM_Presentation633033.pdf (26NOV2024).

1 While Staff has concerns that the benefits of MISO’s Tranche 1 projects are overstated,
2 none of that analysis is specific to ATXI’s proposed Projects. Staff lacks the resources to
3 properly evaluate alternative resource solutions to see if the improvement justifies the cost to
4 MISO Zone 5 customers. However, Staff agrees that the benefits of the proposed Projects to ATXI
5 likely exceed ATXI’s costs because the Projects have been approved by FERC for recovery
6 through the MISO Tariff, and that much of the concern expressed by the entities above relates
7 more towards future LRTP Tranches.

8 *Staff Witness: Michael L. Stahlman*

9 **Whether the proposal is in the Public Interest**

10 Staff’s public interest assessment in this case involves the evaluation of all other Tartan
11 Criteria: need for the project, its economic feasibility, the qualifications and financial ability of the
12 entity requesting a CCN. Staff considers the evaluation of the separate Tartan criteria and whether,
13 on balance, the project promotes the public interest. Additionally, Staff reviews the project and
14 whether there are any considerations not covered by the other Tartan Criteria that should be
15 considered in the public interest assessment. In this case, these considerations include responding
16 to ATXI testimony on economic development, ATXI’s routing study, public engagement, and
17 proposed route selection. Additionally, Staff provides an overview of consumer comments
18 received by the Public Service Commission and at the local public hearing (“LPH”). Finally, Staff
19 recommends a number of conditions to the granting of the CCN.

20 **Economic Development**

21 ATXI only gives a passing reference to economic development in Mr. Shawn E. Schukar’s
22 direct testimony. He states, “First, transmission projects of this size can reasonably be expected
23 to create jobs and otherwise promote economic development opportunities in Missouri. Second,

1 the Projects will also provide a source of additional revenues for Missouri in the form of property,
2 sales, and income taxes.”⁵⁶ Staff does not agree that that this transmission project will increase
3 economic development in Missouri or that additional taxes be considered a benefit. Addressing
4 the second point first, taxes are a cost to ATXI which ultimately get passed on to customers through
5 the transmission revenue requirement. As for economic development, one of the purposes of this
6 transmission project that Mr. Schukar discusses is to offset generation, with its job force currently
7 in Missouri, for generation typically located outside of Missouri.⁵⁷ A Michigan study estimated
8 that windfarms tended to employ seven (7) to eleven (11) full-time equivalent employees per
9 100 MW.⁵⁸ In contrast, Rush Island at its peak had employed more than 200 people for its
10 approximate 1200 MW.⁵⁹

11 Additionally, while lower wholesale prices in Missouri may interest electric consumers if
12 the utility is a net purchaser, it may reduce the incentive of the utility to construct new electric
13 generation in Missouri. Staff recommends that the Commission not rely on economic development
14 or taxes in its decision to approve the proposed Projects.

15 *Staff Witness: Michael L. Stahlman*

16 **Routing Studies and Public Engagement**

17 Staff reviewed the routing studies, testimony of ATXI witnesses, attended the
18 Commission’s LPHs, reviewed the public comments in this case, and conducted discovery
19 regarding the routing studies and ATXI’s public engagement. This section of Staff’s

⁵⁶ Direct Testimony of Shawn E. Schukar, Pages 17-18, Lines 319-322.

⁵⁷ Direct Testimony of Shawn E. Schukar, Page 14, Lines 239-242.

⁵⁸ Wind Turbine Economic Impact: Local Employment. [Wind-Turbine-Economic-Impact-Local-Employment-46932.pdf](#) (26NOV2024).

⁵⁹ Ameren to meet Oct. 15 shutdown deadline for Rush Island plant. Leader Publications, September 2, 2024. [Rush Island Ameren plant to shut down soon | Local News | myleaderpaper.com](#) (26NOV2024).

1 recommendation will provide an overview of ATXI’s routing study and public engagement and
2 then focus in on issues that came to light through public comments and at the LPHs.

3 **Routing Studies Overview**

4 ATXI witness James Nichols provides testimony on the routing studies and ultimate route
5 selection. ATXI contracted with TRC Companies, Inc. (“TRC”) to prepare routing studies to
6 identify proposed routes for the Phase 1 Projects. Phase 1 involves two distinct routes: the FDIM
7 and MMRX routes.

8 The steps of the route selection detailed in TRC’s FDIM study are briefly described
9 below.⁶⁰ The steps outlined in TRC's MMRX and FDIM studies are generally similar.⁶¹

10 1. Scoping: This step sets the foundation for the project(s) by defining technical
11 requirements, goals, limitations, and timelines.

12 2. Defining the Project Area: A focused project area is identified to guide data collection
13 and route development. Considerations include geographic characteristics and the defined
14 endpoints of the project. The project area was intended to be designed to be broad enough
15 to allow exploration of viable alternatives while maintaining a manageable scope.

16 3. Collect and Map Data: This step involves identifying areas more favorable for
17 transmission lines and those that should be avoided. Proximity to existing linear corridors
18 like roads or utility lines may reduce environmental and social impacts. Constraints may
19 include unsuitable terrain, congested areas, ecological sensitivity, or protected lands. TRC
20 categorized this data into three primary groups: ecological, cultural/land use, and technical.

21 4. Proposing and Refining Routes: The goal of this step is to develop candidate routes. Key
22 considerations for the FDIM project made by TRC included evaluating paralleling existing

⁶⁰ Direct Testimony of James Nicholas Part 2, Schedule JN-D1, Pages 6-8.

⁶¹ One key difference is the MMRX study only considered routes along existing utility corridors thus ranking the routes was likely not necessary. See Direct Testimony of James Nicholas Part 1, Schedule JN-D2, Pages 5-6.

1 corridors and cross-country options. Paralleling existing corridors minimizes disruption by
2 considering established utility paths including electric infrastructure and also roadways,
3 railroads, and pipelines. In evaluating cross-country options, TRC discussed in its routing
4 study considering the parcel boundaries, agricultural, and other land uses to develop routes
5 that to minimize impacts on private properties.

6 5. Comparing and Ranking Routes: Routes were evaluated by TRC using a mix of
7 quantitative and qualitative methods. Quantitative assessments score each route based on
8 factors like proximity to constraints (e.g., residences, wetlands) and opportunities (e.g.,
9 existing ROWs). Qualitative evaluations consider elements that cannot be easily measured,
10 such as areas of local significance, unmapped recreational spaces, and areas that may
11 introduce construction challenges like accessibility. This step of the process integrates
12 feedback from stakeholders, including property owners, through public forums.

13 *Staff Witness: Claire M. Eubanks, PE*

14 **Public Engagement Overview**

15 ATXI began its public engagement in April 2024. ATXI witness Leah Dettmers testifies
16 on the issues of public engagement and notice requirements. Ms. Dettmers includes a summary of
17 methods and example materials that ATXI used to inform the public in the area of the projects.⁶²

18 ATXI held four open houses, one in each county where either FDIM or MMRX is proposed
19 to be located.⁶³ Landowners were shown how the line might impact their land and given a chance
20 to make comments.⁶⁴ Additional means to provide comments were provided through phone, email,

⁶² Direct Testimony of Leah Dettmers, Schedule LD-D1.

⁶³ 20 CSR 4240-20.045(6)(K)3. Requires public meetings if 25 or more persons would be entitled to receive notice of the CCN application.

⁶⁴ Staff did not attend the public meetings for Phase 1 but attended one public meeting for the Phase 2 projects (EA-2025-0087).

1 and the Projects' website.⁶⁵ Staff received a summary of comments received in response to Staff
2 Data Request No. 0009. ATXI notified landowners in a 600-foot corridor (i.e. 300 feet on either
3 side of the centerline of the proposed route) as submitted in the CCN application.⁶⁶ The proposed
4 route is referred to as DO-28 in ATXI's application and testimony. ATXI did not notify landowners
5 of the filing of the CCN application along the original route considered (i.e. DO-27).⁶⁷

6 The Commission requires landowner notification under Commission Rule 20 CSR 4240-
7 20.045(6)(K). The rule outlines requirements for utilities to notify affected landowners about
8 projects requiring a CCN and requires public meetings in counties where more than 25 landowners
9 are affected by a CCN application.

10 Regarding notice of the CCN request, 20 CSR 4240-20.045(6)(K)1. states:

11 Applicant shall provide notice of its application to the owners of land, or
12 their designee, as stated in the records of the county assessor's office, on
13 a date not more than sixty (60) days prior to the date the notice is sent,
14 who would be directly affected by the requested certificate, **including the**
15 **preferred route or location, as applicable, and any known alternative**
16 **route or location of the proposed facilities.** For purposes of this notice,
17 land is directly affected if a permanent easement or other permanent
18 property interest would be obtained over all or any portion of the land or
19 if the land contains a habitable structure that would be within three
20 hundred (300) feet of the centerline of an electric transmission line.
21 [Emphasis added.]

22 Regarding public meetings, 20 CSR 4240-20.045(6)(K)3 states:

23 If twenty-five (25) or more persons in a county would be entitled to receive
24 notice of the application, applicant shall hold at least one (1) public
25 meeting in that county. The meeting shall be held in a building open to the
26 public and sufficient in size to accommodate the number of persons in the
27 county entitled to receive notice of the application. Additionally—

⁶⁵ Staff was provided a confidential version of comments received by ATXI through September 18, 2024 in response to Staff Data Request Nos. 0009 and 0027.

⁶⁶ Direct Testimony of Tara Green, Page 10, Lines 3-4.

⁶⁷ Response to Staff Data Request No. 0019.

1 A. All persons entitled to notice of the application shall be afforded a
2 reasonable amount of time to pose questions or to state their concerns;

3 B. To the extent reasonably practicable, the public meeting shall be held at
4 a time that allows affected landowners an opportunity to attend; and

5 C. Notice of the public meeting shall be sent to any persons entitled to
6 receive notice of the application.

7 **Public Outreach and ATXI's Route Proposal - FDIM**

8 ATXI's proposed route for the FDIM project, selected through the route selection process,
9 is DO-28. This 345 kV transmission line spans 42 miles and crosses approximately 129 parcels
10 along the proposed right-of-way. Approximately 11 miles of the route runs parallel to existing
11 electric infrastructure.

12 DO-27 was a route that was identified as having the overall best score in terms of suitability
13 of the first 27 routes considered. It is Staff's understanding that this route was part of the study
14 area presented at open public meetings hosted by ATXI.⁶⁸ However, as a result of ATXI's public
15 engagement DO-28 was identified.⁶⁹ ATXI represents DO-28 was selected as the proposed route
16 for the FDIM Project on or around May, 14, 2024.⁷⁰ Routes DO-28 and DO-27 are shown in
17 Figure 3. Figures 4 and 5 focus on the re-route area of DO-28 and DO-27 as this re-route area was
18 of significant concern to landowners during the Commission's LPHs.

19 *continued on next page*

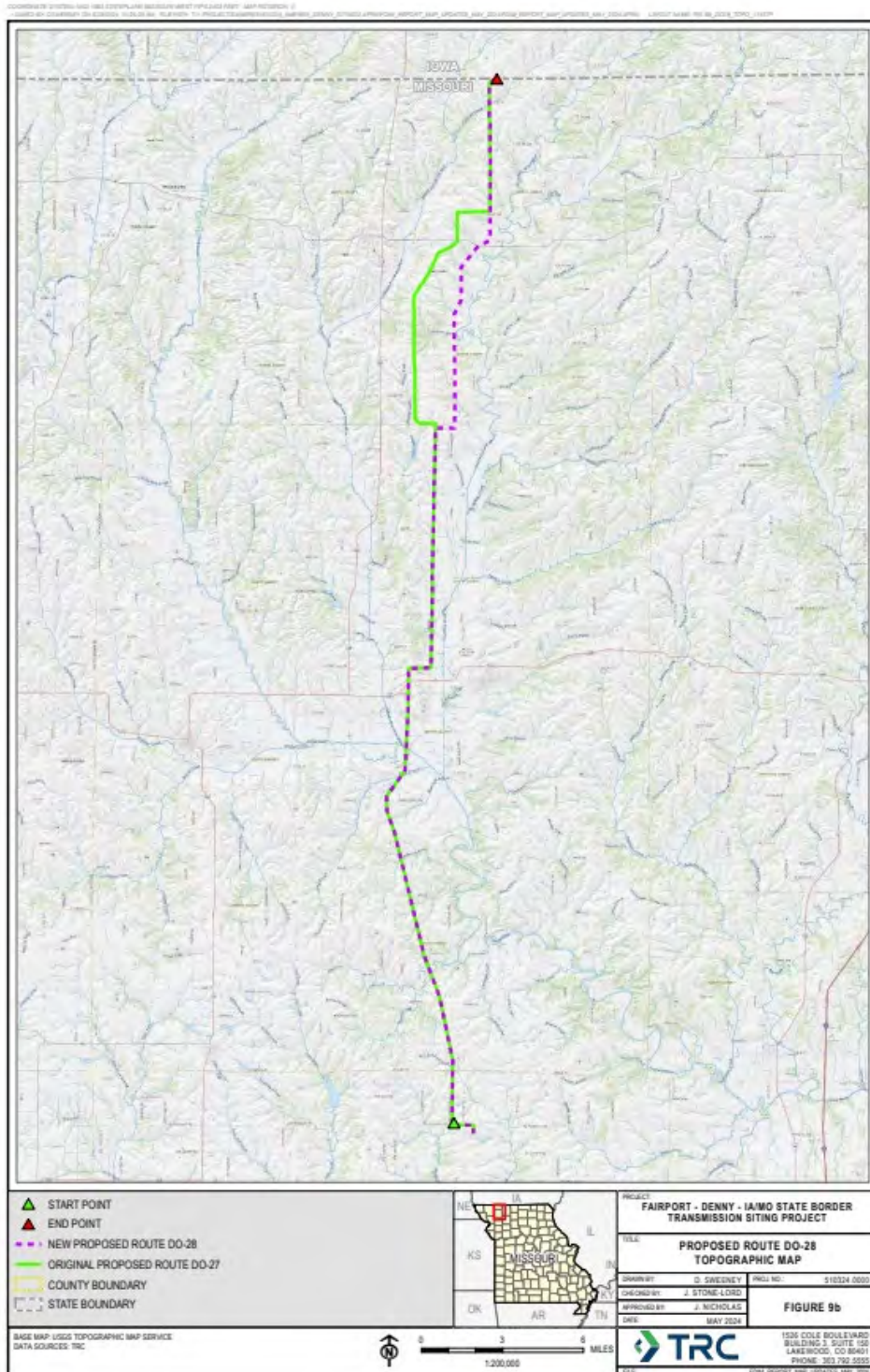
⁶⁸ Open houses were held April 9, 2024 in Worth County, April 10, 2024 in Gentry County, April 11, 2024 in Dekalb County, and April 16, 2024 in Marion County. Schedule LD-D1, page 1.

⁶⁹ Direct Testimony of James Nicholas, Schedule JN-D1, page 28.

⁷⁰ Response to Staff Data Request No. 0036.

1

Figure 3. Proposed Route DO-28 and DO-27⁷¹

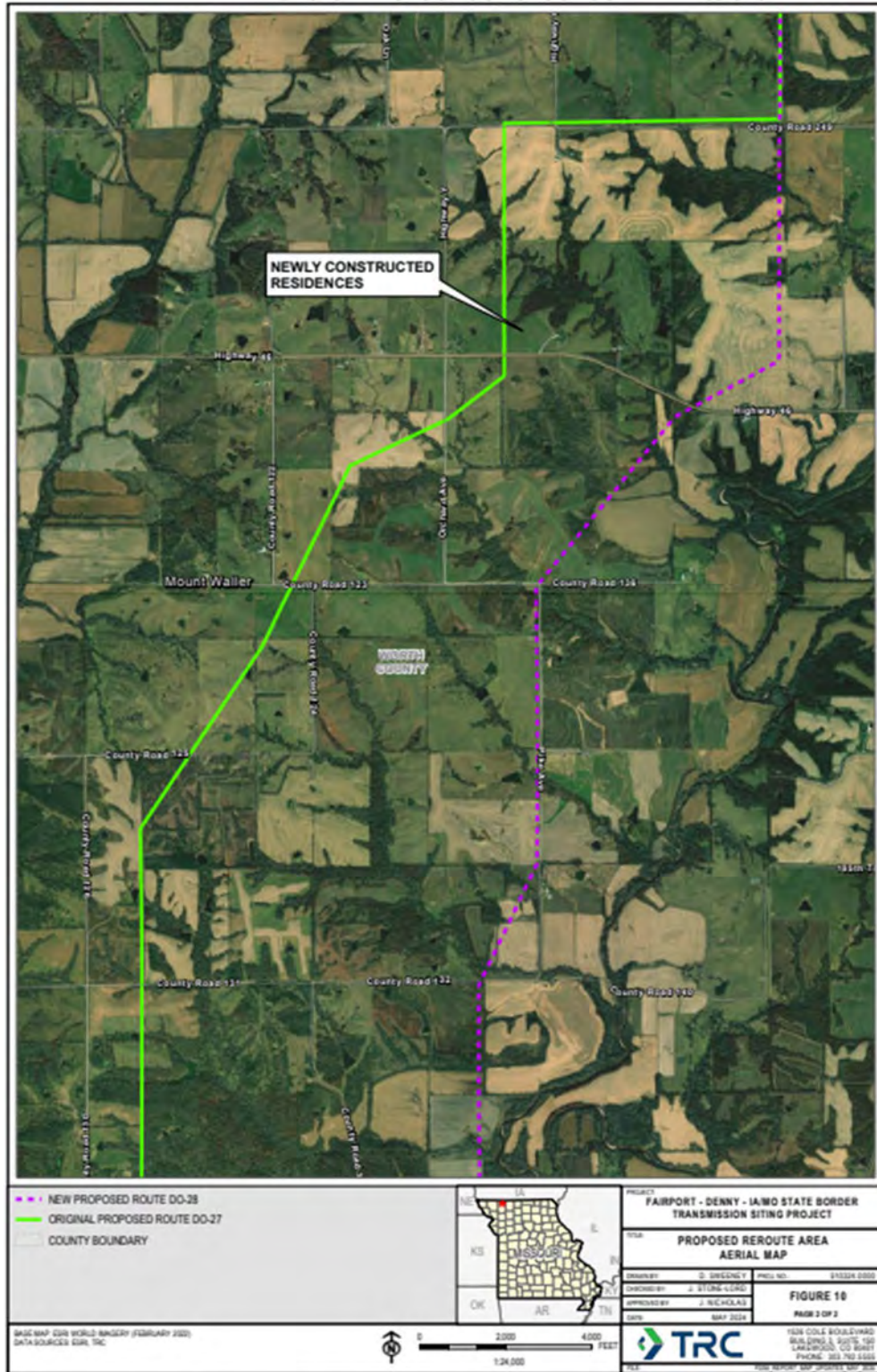


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⁷¹ Direct Testimony of James Nicholas, Schedule JN-D1, Page 45.

1

Figure 4. Proposed Route DO-28 and DO-27⁷²

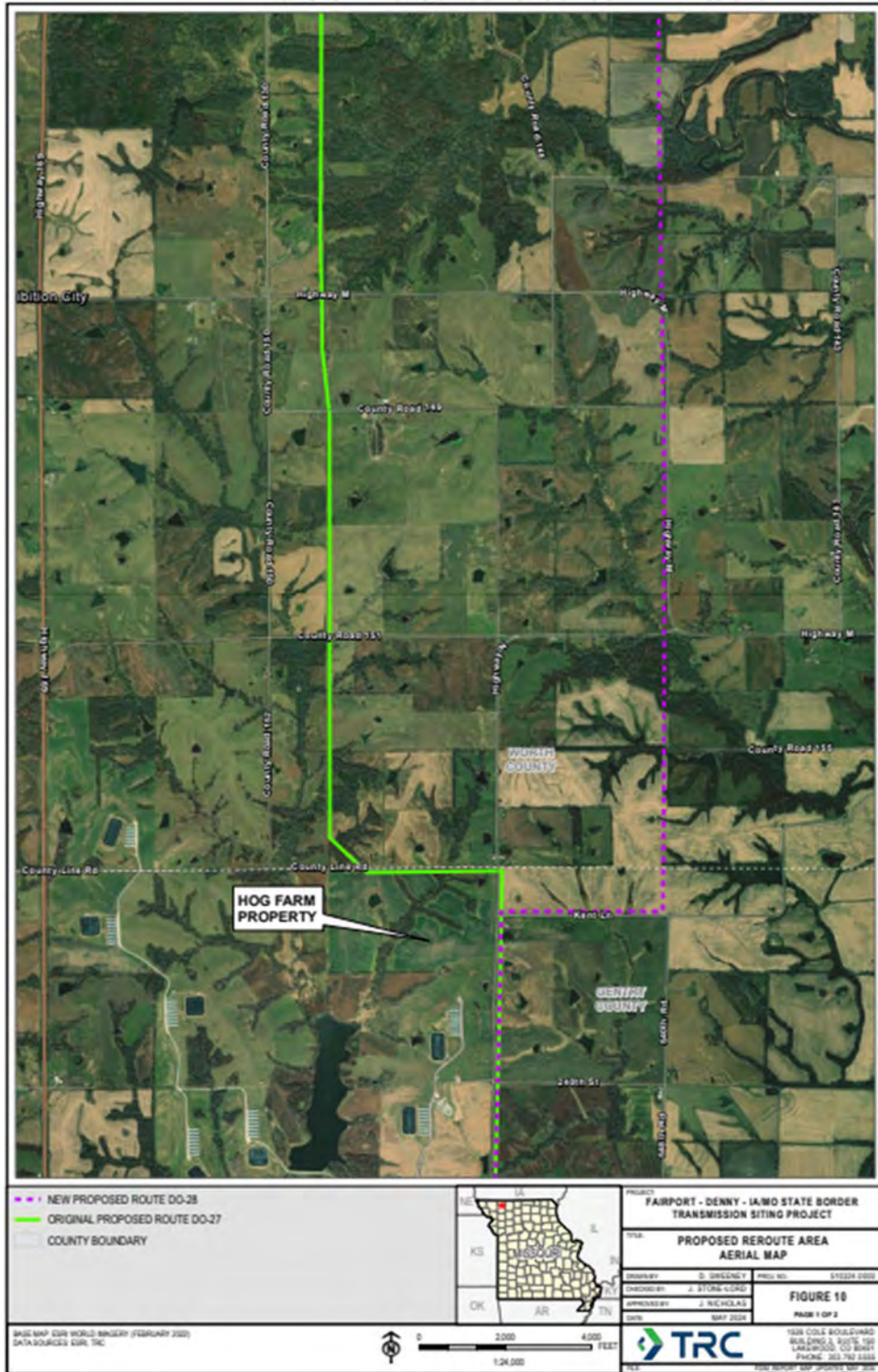


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⁷² Direct Testimony of James Nicholas, Schedule JN-D1, Page 47.

1

Figure 5. Proposed Route DO-28 and DO-27⁷³



2

⁷³ Direct Testimony of James Nicholas, Schedule JN-D1, Page 46.

1 ATXI asserts the routing of FDIM was changed as a result of ATXI’s public outreach
2 efforts.⁷⁴ Originally, DO-27 was the most favorable route of the 27 routes originally considered,
3 but DO-28 is ATXI’s proposed route in its application before the Commission. ATXI discusses
4 the route change in the Direct Testimony of James Nicolas and presents both routes in Schedule
5 JN-D1 (FDIM Route Selection Study, by TRC, dated July 2024). TRC provided three reasons for
6 the route change from DO-27 to DO-28.⁷⁵

- 7 1. A USDA-regulated hog farm is located southeast of the intersection of Highway N and
8 230th Road, at the border of Gentry and Worth counties. Initially, Route DO-27
9 followed the south side of 230th Road. However, the property south of the road is also
10 part of the hog farm. TRC asserts the hog farm creates access problems for construction
11 and maintenance due to contamination concerns at the facility.
- 12 2. TRC asserts following Highway N northward at this point is not feasible due to a
13 residence at the intersection of Highway N and 230th Road. The homeowner expressed
14 concerns about the line's proximity to their residence at a public meeting.
- 15 3. Landowners at a public meeting pointed out the proximity of newly built residences
16 north of Highway 46.

17 While contamination and access concerns are relevant considerations, Staff notes that,
18 other than the mailings of notifications of open houses and the CCN application, ATXI did not
19 document other contacts from or with the owner of the hog farm.⁷⁶ TRC’s report states,
20 “[t]his presented access issues both for construction and ongoing line maintenance, as the facility

⁷⁴ Direct Testimony of James Nicholas, Page 21, Lines 1-20.

⁷⁵ Direct Testimony of James Nicholas, Schedule JN-D1, Page 29.

⁷⁶ Response to Data Request No. 0012 states in part “To date, ATXI does not have any other records of contact from or with the property owners of the hog farm.”

1 restricts access due to contamination concerns.” Staff has requested support for this statement.

2 Staff further notes that an existing natural gas pipeline crosses the hog farm.⁷⁷

3 The table below is TRC’s comparison of data between DO-27 and DO-28:

Routing Criteria	DO-27	DO-28
Land Use & Cultural Criteria		
Number of Parcels Crossed by Centerline	133	129
Transmission Lines Paralleled (miles)	14	11
Pipelines Paralleled (miles)	0	0
Restricted Access Roads Paralleled (Highways) (miles)	0	0
Local Roads Paralleled (miles)	2	9
Cemeteries within 1,000 feet of centerline	0	0
Agricultural Land crossed (linear mileage)	34	35
Existing Solar/Wind Farms crossed	0	0
Residential Structures within 150 feet of centerline	1	2
Non-Residential Structures within 75 feet of centerline	0	2
Non-Residential Structures within 150 feet of centerline	3	5
Technical/Constructability		
Length (miles)	44	42
Turn Angles > 15 Degrees	18	17
Turn Angles > 50 Degrees	11	9
Slope (>20%) (Linear miles of individual segments spanning > 500')	1	1
Local Roads and Streets Crossed	40	42
Pipeline Crossings (Transmission)	3	4
Oil & Gas Wells (Count within 200')	1	5
MET towers & Communication Towers (within 1,000')	0	0
Water Wells (Count within 200')	2	0
Ecological & Biological		
Total Streams Crossed (NHD)	60	68
Impaired Waters	0	0
100yr floodplain crossed by centerline (feet)	30,119	34,725
PFO wetlands in the ROW (NWI) - acres	5	15
PSS wetlands in the ROW (NWI) - acres	0	1
PEM wetlands in the ROW (NWI) - acres	8	7
Forested Areas (acres to clear)	111	175

4

5 As shown in the table above, and noted in TRC’s routing study, DO-28 (ATXI’s proposed

6 route) may have more sensitivity to forested areas, crosses more streams, and has more right-of

7 way proposed in the 100-year floodplain. Further, additional structures are within 150 feet of the

8 center line. Staff notes the typical ROW width is 150 feet (75 feet on either side of the centerline).

⁷⁷ EA-2024-0302 Application, Appendix E, Page 12 of 18.

1 There are no residential structures within 75 feet of the centerline, while two non-residential
2 structures are located within 75 feet of the centerline.⁷⁸

3 Landowners affected by the DO-28 route change were notified by July 5, 2024,⁷⁹ with
4 the exception of one. ATXI represents that neither it nor its consultant was aware in May 2024
5 that this parcel was created by the conveyance of part of a larger parcel.⁸⁰ ATXI contacted
6 this previously unnotified landowner on November 7, 2024. An affidavit signed by Leah Dettmers
7 was filed in the case on November 8, 2024, confirming that the notification letter had been sent.⁸¹
8 As of October 31, 2024, ATXI received feedback from 7 of approximately 34 landowners⁸² whose
9 land is within 300 feet of the centerline (600 foot corridor) of DO-28. The public comments and
10 testimony received at the Commission LPHs is discussed in on page 34.

11 Staff has several concerns with ATXI's notification of affected landowners. ATXI did not
12 notify landowners along DO-27, but did notify landowners along DO-28, of the CCN application.⁸³
13 The Commission rule requires notice to not only affected landowners but also those along a known
14 alternative route. ATXI did not file this application for DO-27, and while Staff considers the notice
15 provided in this case to be minimally complaint, encourages ATXI to include notice to landowners
16 on all routes which are presented to the public for input. ATXI witness Leah Dettmers states at
17 page 6, lines 17-19: "The Public Engagement Team identified potentially affected landowners via
18 tax parcel information dated 2020-2021 for the FDIM Project and 4th quarter 2023 for the

⁷⁸ Direct Testimony of James Nicholas, Schedule JN-D1, Page 30.

⁷⁹ Data Request Nos. 0023 and 0022.

⁸⁰ Data Request No. 0023.

⁸¹ 20 CSR 4240-20.045(6)(K)4. If applicant, after filing proof of compliance, becomes aware of a person entitled to receive notice of the application to whom applicant did not send such notice, applicant shall, within twenty (20) days, provide notice to that person by certified mail, return receipt requested, containing all the required information. Applicant shall also file a supplemental proof of compliance regarding the additional notice.

⁸² Data Request No. 0025

⁸³ One landowner along DO-28 was notified of the CCN application on November 7, 2024.

1 MMRX Project.” Commission rule requires applicants to provide “notice of its application to the
2 owners of land, or their designee, as stated in the records of the county assessor’s office, on a date
3 not more than sixty (60) days prior to the date the notice is sent” and requires “[n]otice of the
4 public meeting shall be sent to any persons entitled to receive notice of the application.”
5 ATXI indicated in response to Staff Data Request No. 0022 that it did query the county assessor
6 offices in March 2024. Staff has issued a follow-up data request for clarification.⁸⁴

7 **MMRX Public Outreach and Route Selection**

8 The steps of the route selection outlined in TRC's MMRX study⁸⁵ are similar to those in
9 the FDIM study.⁸⁶ However, given existing utility corridors are available for paralleling the
10 MMRX segments, the route study focused on proximity measurements to existing structures.⁸⁷
11 The routing team considered paths north and south of the existing double circuit 345/345 kV line
12 running between the Maywood and Palmyra substations and a rebuild of the 161 kV line from
13 Palmyra and the Mississippi River crossing.⁸⁸ ATXI has proposed the MMRX line will follow to
14 the north as this presents the most distance from existing structures.⁸⁹

15 The MMRX line is proposed to be approximately 9 miles long, with approximately 3 miles
16 of newly constructed 345 kV line connecting the Maywood and Palmyra substations.
17 The remaining approximately 6 miles is an upgrade of an existing 161 kV line to a double circuited

⁸⁴ Staff Data Request No. 0022.1.

⁸⁵ Direct Testimony of James Nicholas, Schedule JN-D2. *Maywood – Mississippi River 345 kV Transmission Line Route Selection Study*, Prepared by TRC, May 16, 2024.

⁸⁶ Direct Testimony of James Nicholas, Schedule JN-D1. *Fairport to Denny to IA/MO Border 345 kV Transmission Line Route Selection Study*, Prepared by TRC, July 2024.

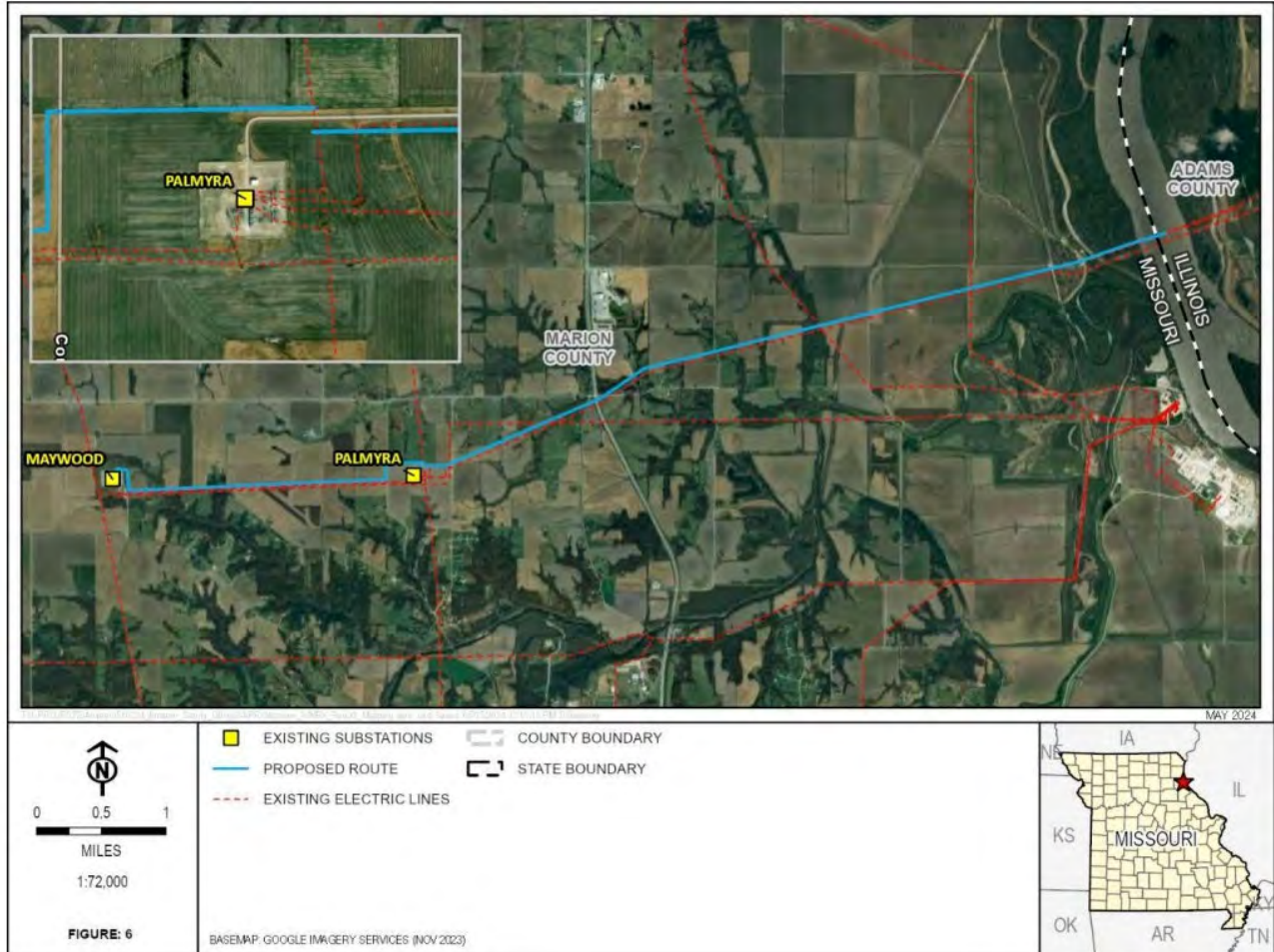
⁸⁷ Direct Testimony of James Nicholas, Schedule JN-D2, Page 13.

⁸⁸ Direct Testimony of James Nicholas, Schedule JN-D2, Page 4.

⁸⁹ Direct Testimony of James Nicholas, JN-D2, Page 13.

1 345 kV/161 kV line from the Palmyra substation to the Mississippi River.⁹⁰ Figure 6 depicts the
2 proposed route for MMRX.

3 **Figure 6. Proposed Route MMRX⁹¹**



5 *Staff Witness: Claire M. Eubanks, PE*

6 **Consumer Comments and Local Public Hearing**

7 Public Comments addressed in this section are comments the Commission received from
8 the public and are entered into the Commission’s Electronic Filing and Information System
9 (“EFIS”) as public comments. Additionally, Staff provides a general summary of the testimony

⁹⁰ Application, paragraph 20.

⁹¹ Direct Testimony of James Nicholas, Schedule JN-D2, Page 14.

1 received at the LPHs. Staff typically recommends a set of conditions to allow for and set
2 procedures for micro-siting. These recommended conditions may address certain concerns raised
3 during the LPHs. Staff is also recommending additional conditions given the public engagement
4 concerns raised by landowners at the LPHs.

5 As of December 18, 2024, the Commission has received five (5) public comments⁹² in
6 EFIS related to this case. One comment indicated that it was expressing the concerns of a group
7 of landowners owning nearly 1,000 acres in Worth County. Another was filed by an individual
8 landowner in Worth County. Both comments highlighted concerns with the route location and the
9 procedures of which ATXI used to provide notice to landowners. After receiving these consumer
10 comments, Staff issued data requests to ATXI⁹³ and notified parties that Staff would like the
11 Commission to hold LPHs. The most recent consumer comments were received after the LPHs.
12 The written public comments received through December 17, 2024, are included in Attachment B.

13 The Commission held an in-person LPH on December 9, 2024, and a virtual LPH on
14 December 10, 2024. During the in-person LPH on December 9, 2024, nine (9) individuals testified
15 to the Commission. Affected landowners and members of the community commented on ATXI's
16 public engagement process, specific concerns with the route's impact to their land, and specific
17 situations related to their individual properties. Other themes were concerns with the need for the
18 project, safety, and a desire for double-circuited lines. During the December 10, 2024, LPH,
19 five (5) individuals testified. Additional detail and perspective was provided by an individual
20 regarding the re-route justification, health and safety impacts of the line, and the quality of notices
21 were also raised by individuals. Finally, concerns regarding landowner compensation were raised.

⁹² One consumer comment was entered into EFIS twice.

⁹³ Staff Data Request No. 0018 issued on October 2, 2024.

1 Staff provides additional detail and context regarding landowner concerns below. Regarding
2 landowner concerns about the need for the Project, Staff previously discussed need for the Project
3 beginning on page 5.

4 *Staff Witness: Claire M. Eubanks, PE*

5 **Public Engagement and Re-route Justification**

6 As previously mentioned, ATXI did not provide notice of the CCN application to
7 landowners along route DO-27. Staff views DO-27 as a known alternative route given that that
8 ATXI discusses the re-route to DO-28 in its direct testimony, presents both options in the TRC
9 routing study, and held open houses regarding a study area encompassing DO-27 and DO-28.⁹⁴
10 ATXI provided notice of the CCN to landowners within 300 feet of the proposed centerline,
11 regardless of whether there is a structure, whereas the Commission rule requires notification of
12 landowners whom an easement would be sought from and those whose habitable structures are
13 within 300 feet.

14 During the virtual LPH, one individual questioned ATXI's re-route to the DO-28 alignment
15 and proposed an alternative route.⁹⁵ Staff previously discussed the re-route on pages 31-32 of this
16 Recommendation. DO-28 (the proposed route) is approximately 1 ½ miles east of DO-27 for
17 approximately 9 ¼ miles.⁹⁶ Thus, if the Commission were to order ATXI to re-evaluate or return
18 to the DO-27 alignment this may create additional frustration and confusion given the landowners
19 along DO-27 were not identified by ATXI as affected landowners and did not receive notice of the
20 CCN application when filed. A reasonable resolution would include additional opportunities for
21 landowners associated with DO-27 to provide testimony to the Commission.

⁹⁴ Response to Staff Data Request No. 0019.

⁹⁵ Commission Exhibit 2.

⁹⁶ Direct Testimony of James Nicholas, page 21, lines 17-20.

1 An individual testified at the LPH regarding the quality of maps received from ATXI,
2 noting the difficulty landowners had in determining whether the route affected them. Staff notes
3 that ATXI has one website for the Northern Missouri Grid Transformation Program that
4 covers both Phase 1 and Phase 2.⁹⁷ However, Phase 2 currently has interactive maps using
5 Google maps whereas landowners on Phase 1 did not have access to this information during
6 much of this CCN case. ATXI had posted the interactive map for Phase 1 on its website from
7 April 5, 2024, to June 1, 2024.⁹⁸ ATXI appears to have updated its website sometime between
8 December 10, 2024, and December 12, 2024, to include both Phase 1 and Phase 2 on its
9 interactive maps.

10 Given the above discussion, Staff recommends that the Commission order the following:

- 11 • Staff recommends the Commission grant the CCN, subject to another virtual local
12 public hearing for those landowners in the re-route area of DO-27 to DO-28
13 (generally between the corner of Highway N and Kent Lane to County Road 249),
14 providing an opportunity to those landowners to express their concerns, if any, on
15 the route.
- 16 • ATXI shall, for all current and future projects in Missouri, develop and maintain
17 interactive route maps on its website(s) showing preferred and known alternative
18 routes. These interactive maps shall be maintained from at least the date of any
19 public meeting(s) held, when required, through the effective date of the
20 Commission's Report and Order ruling on the subject CCN application. If public
21 meetings are not required to be held, ATXI shall post interactive maps beginning
22 on the date it provides notice of a CCN application to affected landowners.

⁹⁷ CCN Application for Phase 2 (i.e. Denny-Zachary-Thomas Hill-Maywood (DZTM) Project) was filed in EA-2025-0087.

⁹⁸ Response to Staff Data Request No. 0020.

- 1 • ATXI shall, for all future projects in Missouri, include instructions for accessing
- 2 the interactive maps on all required notifications sent to affected landowners.
- 3 • ATXI shall, for all future projects in Missouri, periodically refresh its search of
- 4 property records throughout the pendency of a CCN case.

5 *Staff Witness: Claire M. Eubanks, PE*

6 **Impacts to Landowner properties**

7 Individuals expressed concerns with the route impacting farming operations, future
8 construction plans, and the crossing of a pond. Regarding the crossing of a pond, Staff notes that
9 the National Electric Safety Code (NESC) (adopted by the Commission in 20 CSR 4240-18),
10 provides minimum clearances above water surfaces. For maintenance purposes, pond crossing may
11 not be desirable.⁹⁹ Staff has requested clarification from ATXI whether micro-siting may be
12 feasible in this instance.¹⁰⁰

13 Staff is recommending the Commission order a number of conditions related to routing and
14 landowner impact:

- 15 • ATXI shall follow the construction, clearing, maintenance, repair, and right-of-way
- 16 practices set out in Schedule TG-D4 filed with Tara Green’s Direct Testimony.
- 17 ○ These procedures cover certain impacts such as installation of temporary gates,
- 18 reimbursement of time to move livestock (if required), and practices to alleviate
- 19 compaction impacts, among other measures related to construction, clearing,
- 20 maintenance, repair, and right-of-way practices.

⁹⁹ Response to Staff Data Request No. 0008, attachment 13 (Public). ATXI’s own aerial patrol specification seeks to identify ponds that encroach on the right-of-way as width for vehicles is needed for line maintenance.

¹⁰⁰ Response to Staff Data Request No. 0033 due January 1, 2025.

- 1 • Staff recommends several conditions to allow and set out procedures for micro-siting.
2 These are included in the conclusion section of this report. The recommended conditions
3 allow both ATXI and the landowner to initiate a deviation to the route.

4 *Staff Witness: Claire M. Eubanks, PE*

5 **Safety and EMF**

6 Several landowners expressed concerns with safety generally during the LPHs.
7 ATXI is proposing a 150-foot-wide right-of-way¹⁰¹ and will design the project to comply with
8 all applicable regulatory requirements, including the NESC which the Commission has adopted in
9 20 CSR 4240-18.¹⁰²

10 Additionally, a landowner expressed concern with Electric and Magnetic Fields (“EMF”)
11 and the distance of the line from their residence. The transmission of power inherently results in
12 the creation of both types of fields. Electric fields are areas around a charge that acts or exerts a
13 force upon other charged objects. Magnetic fields result from the flow of current through a
14 conducting material.

15 EMF is a topic that is brought up in nearly every line certificate case. There have been
16 studies performed that draw a correlation between negative health impacts and static EMF. Two
17 of the latest studies showing correlation are:

- 18 • *The Influence of Static Electric Field Generated Nearby High Voltage Direct Current*
19 *Transmission Lines on Hormonal Activity of Experimental Animals EHE’ 07 – 2nd*
20 *International Conference on Electromagnetic Fields, Health and Environment*
21 *Wroclaw, Poland, September 10-12, 2007.*
- 22 • *Biointive 2012, A Rationale for Biologically based Exposure Standards for*
23 *Low-Intensity Electromagnetic Radiation.*

¹⁰¹ The line segment from Maywood to Palmyra will have a 100-foot corridor. Direct Testimony of Tara Green, Page 6, Lines 10-11.

¹⁰² Staff notes it has requested confirmation that ATXI intends to comply with the current version of the NESC (2023) in Staff Data Request No. 0031.

1 There have been Studies performed that do not draw a correlation between negative health
2 impacts and static EMF. Below are studies that conclude EMF does not cause long term health
3 effects:

- 4 • *International Agency for Research on Cancer, IARC Monographs on the Evaluation of*
5 *Carcinogenic Risks to Humans, Vol. 80: Static and Extremely Low-Frequency (ELF)*
6 *Electric and Magnetic Fields (Lyon, France, IARC Press, 2002).*
- 7 • *National Radiological Protection Board (NRPB), Advice on Limiting Exposure to*
8 *Electromagnetic Fields (0-300 GHz), Vol. 15, No. 2 (Didcot, UK, 2004).*
- 9 • *World Health Organization, Environmental Health Criteria Monograph No. 232.*
10 *Static Fields (Geneva, Switzerland, World Health Organization, 2006).*
- 11 • *International Committee on Electromagnetic Safety, IEEE Standard for Safety Levels*
12 *with Respect to Human Exposure to Electromagnetic Fields 0 to 3 kHz C95.6-2002*
13 *(Piscataway, NJ, IEEE, 2002) (Reaffirmed 2007).*
- 14 • *Advisory Group on Non-ionizing Radiation, Static Magnetic Fields, RCE-6,*
15 *Documents of the Health Protection Agency (Chilton, UK, 2008).*
- 16 • *International Commission on Non-ionizing Radiation Protection, Guidelines on Limits*
17 *of Exposure to Static Magnetic Fields, Health Physics, 96:504-514 (2009).*

18 The World Health Organization (“WHO”) and International Agency on Cancer Research
19 (“IACR”) have classified radiofrequency electromagnetic field as a Group 2B carcinogen.¹⁰³
20 A Group 2B carcinogen is a type of agent that has less than limited data showing carcinogenic
21 effects in humans and less than sufficient data showing carcinogenic effects in animals.¹⁰⁴

22 The WHO did go on to state “[d]espite many studies, the evidence for any effect remains
23 highly controversial. However, it is clear that if electromagnetic fields do have an effect on cancer,
24 then any increase in risk will be extremely small. The results to date contain many inconsistencies,
25 but no large increases in risk have been found for any cancer in children or adults.”¹⁰⁵

¹⁰³ http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf pg 1 accessed 12/27/2016.

¹⁰⁴ http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf pg 5 accessed 12/27/2016.

¹⁰⁵ <http://www.who.int/peh-emf/about/WhatisEMF/en/index1.html>.

1 While not precedent, the Commission has granted a line certificate in EA-2007-0319,
2 EA-2013-0089, EA-2015-0146, EA-2017-0345, and EA-2021-0087, among others. Staff does not
3 recommend rejection of the application on the basis of public concerns about the impact of EMF
4 on health.

5 *Staff Witness: Shawn E. Lange, PE*

6 **Double-circuiting**

7 At least one individual expressed concern that double-circuiting the transmission line with
8 a local cooperative line is not being proposed by ATXI. Staff inquired about ATXI's interactions
9 with NW Electric Power Cooperative. ATXI represents that NW Power expressed concerns with
10 the attachment of their 69 kV facilities on the same structure as the 345 kV line, including that this
11 would increase the height of the NW Power infrastructure and its standard equipment does not
12 reach these heights.¹⁰⁶

13 *Staff Witness: Claire M. Eubanks, PE*

14 **Recommended Conditions**

15 In summary, based on Staff's review: 1) the Project is needed; 2) ATXI is qualified to
16 construct, install, own, operate, maintain, and otherwise control and manage the Project; 3) ATXI
17 has the financial ability to undertake the Project; and 4) the Project is economically feasible.
18 Further, based on Staff's experience with transmission CCN cases similar to the present case, and
19 to ensure the Project is in the public interest, Staff recommends the following conditions be
20 imposed by Commission order:

¹⁰⁶ Response to Staff Data Request No.0013.

1 **Right-of-way Acquisition and Micro-siting:**

- 2 • Throughout the right-of-way acquisition process, ATXI will use all reasonable efforts to
3 follow the route(s) depicted in Attachment E of the Application. But ATXI will be allowed
4 to deviate from the depicted route in two scenarios:
5 a. First, if surveys or testing do not necessitate a deviation, ATXI may deviate from
6 the depicted route on a particular parcel if ATXI and the landowner on which the
7 deviation will run agree. Either ATXI or landowner may initiate such a request to
8 deviate.
9 b. Second, if ATXI determines that surveys or testing require a deviation, ATXI will
10 negotiate in good faith with the affected landowner and if agreement can be
11 reached, ATXI may deviate from the depicted route on that parcel, as agreed with
12 the affected landowner.

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

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

- 35 • Absent a voluntary agreement for the purchase of the property rights, the transmission line
36 shall not be located so that a residential structure currently occupied by the property owners
37 will be removed or located in the easement, including for electrical code compliance
38 purposes.
39 • Prior to the commencement of construction on a parcel, ATXI will secure an easement,
40 which will include a surveyed legal description showing the precise dimension, including
41 the length and width, for the permanent transmission line easement area for each affected
42 parcel. In addition, ATXI will track each easement grant by way of a spreadsheet that

1 identifies each parcel by Grantor and County, and which contains the recording information
2 for each parcel. Upon securing all necessary easements for the Project, ATXI will file a
3 copy of the spreadsheet with the Commission, to which a map will be attached. For each
4 parcel, the map and the spreadsheet will include a unique indicator that allows the
5 Commission to see where on the map that parcel is located.

- 6 • ATXI shall follow the construction, clearing, maintenance, repair, and right-of-way
7 practices set out in Schedule TG-D4 filed with Tara Green’s Direct Testimony.

8 **Reporting requirements:**

- 9 • ATXI shall file a legal description of the line segments when finalized.¹⁰⁷
- 10 • ATXI shall file the final JUA with the Commission within 30 days of executing the
11 agreement.
- 12 • ATXI shall file with the Commission in this case all required government approvals and
13 permits—e.g., any applicable land disturbance permits, Missouri State Highway
14 Commission permits, or US Army Corps of Engineers permits—before beginning
15 construction on the part of the Projects (FDIM and MMRX) where the approvals and
16 permits are required.
- 17 • ATXI shall file with the Commission any agreement between ATXI and the pipeline
18 companies that have assets being crossed by the Projects (FDIM and MMRX). The FDIM
19 and MMRX routes do not parallel pipelines.
- 20 • ATXI shall file with the Commission the annual report it files with FERC.
- 21 • ATXI shall file any vegetation management filing made to FERC, NERC, or a regional
22 reliability organization in EFIS as a non-case related filing.¹⁰⁸
- 23 • Obtain acknowledgement from Ameren Missouri that they remain bound by the
24 following provision from the 3rd Order Modifying the 2012 Report and Order in Case No.
25 EO-2011-0128:

26 For transmission facilities located in Ameren Missouri’s certificated service
27 territory that are constructed by an Ameren affiliate and that are subject to regional
28 cost allocation by MISO, for ratemaking purposes in Missouri, the costs allocated
29 to Ameren Missouri by MISO shall be adjusted by an amount equal to the
30 difference between: (I) the annual revenue requirement for such facilities that
31 would have resulted if Ameren Missouri’s Commission-authorized ROE and
32 capital structure had been applied and there had been no construction work in
33 progress (CWIP) (if applicable), or other FERC Transmission Rate Incentives,
34 including Abandoned Plant Recovery, recovery on a current basis instead of
35 capitalizing pre-commercial operations expenses and accelerated depreciation,
36 applied to such facilities and (ii) the annual FERC-authorized revenue requirement
37 for such facilities. The ratemaking treatment established in this provision will,

¹⁰⁷ Proposed descriptions are included in the Direct Testimony of Tara Green, Schedule TG-D1 and TG-D2.

¹⁰⁸ 20 CSR 4240-23.030(5).

1 unless otherwise agreed or ordered, end with the Commission’s report and order at
2 the conclusion of the case to be filed by Ameren Missouri on or before March 15,
3 2023, regarding its continued participation in MISO, switch to participation in
4 another RTO, or operation as an [Independent Coordinator of Transmission].¹⁰⁹

5 **Landowner communication for current and future projects:**

- 6 • Staff recommends the Commission’s granting of a CCN for Phase 1 Projects be
7 conditioned on a CCN being granted for Phase 2.
- 8 • Staff recommends the Commission grant the CCN, subject to another virtual local public
9 hearing for those landowners in the re-route area of DO-27 to DO-28 (generally between
10 the corner of Highway N and Kent Lane to County Road 249), providing an opportunity to
11 those landowners to express their concerns, if any, on the route.
- 12 • ATXI shall, for all current and future projects in Missouri, develop and maintain interactive
13 route maps on its website(s) showing preferred and known alternative routes. These
14 interactive maps shall be maintained from at least the date of any public meeting(s) held,
15 when required, through the effective date of the Commission’s Report and Order ruling on
16 the subject CCN application. If public meetings are not required to be held, ATXI shall
17 post interactive maps beginning on the date it provides notice of a CCN application to
18 affected landowners.
- 19 • ATXI shall, for all future projects in Missouri, include instructions for accessing the
20 interactive maps on all required notifications sent to affected landowners.
- 21 • ATXI shall, for all future projects in Missouri, periodically refresh its search of property
22 records throughout the pendency of a CCN case.

23 *Staff Witness: Claire M. Eubanks, PE*

24 **Attachment A – Summary of Application Filing Requirements**

25 **Attachment B - Public Comments received through December 18, 2024**

26 **Appendix 1 - Staff Credentials**

¹⁰⁹ Sponsoring Staff witness Kimberly K. Bolin.

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)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

Case No. EA-2024-0302

AFFIDAVIT OF KIMBERLY K. BOLIN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KIMBERLY K. BOLIN and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.


KIMBERLY K. BOLIN

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 19th day of December 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070


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) Case No. EA-2024-0302
Certificate of Convenience and Necessity)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

AFFIDAVIT OF MALACHI BOWMAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MALACHI BOWMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.



MALACHI BOWMAN

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 16th day of December 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



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)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

Case No. EA-2024-0302

AFFIDAVIT OF CLAIRE M. EUBANKS, PE

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW CLAIRE M. EUBANKS, PE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.


CLAIRE M. EUBANKS, 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 19th day of December 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070


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)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

Case No. EA-2024-0302

AFFIDAVIT OF SHAWN E. LANGE, PE

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW SHAWN E. LANGE, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.



SHAWN E. LANGE, 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 18th day of December 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



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) Case No. EA-2024-0302
Certificate of Convenience and Necessity)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

AFFIDAVIT OF MICHAEL L. STAHLMAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Rebuttal Report*; and that the same is true and correct according to his best knowledge and belief.

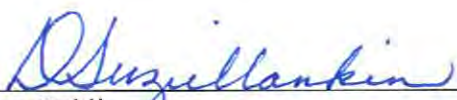
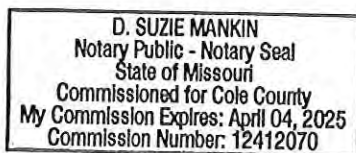
Further the Affiant sayeth not.



MICHAEL L. STAHLMAN

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 16th day of December 2024.



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)
under Section 393.170.1, RSMo. relating to)
Transmission Investments in Northwest and)
Northeast Missouri)

Case No. EA-2024-0302

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 Rebuttal Report*; 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 16th day of December 2024.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



Notary Public

Attachment A – Summary of application requirements

ATXI filed their Application pursuant to Section 393.170.1, RSMo, 20 CSR 4240-2.060, and 20 CSR 4240-20.045 to the Missouri Public Service Commission (Commission) for a certificate of convenience and necessity (CCN) authorizing it to construct, install, operate, control, manage, and maintain the proposed projects and, pursuant to Section 393.190.1, RSMo, 20 CSR 4240-2.060, and 20 CSR 4240-10.105, makes this application to the Commission for permission and authority to transfer an undivided 49% interest in the transmission facilities for the FDIM Project, excluding the land for the Denny Substation, to the Missouri Joint Municipal Electric Utility Commission (“MJMEUC”) shortly before the FDIM Project is placed into service.

20 CSR 4240-2.060

20 CSR 4240-2.060(1)(A) requires the legal name of each applicant, a brief description of the legal organization of each applicant, whether a Missouri corporation, foreign corporation, partnership, proprietorship, or other business organization, the street and mailing address of the principal office or place of business of each applicant and each applicant’s electronic mail address, fax number and telephone number, if any.

- Application, paragraph 1. ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(B) requires if any applicant is a Missouri corporation, a Certificate of Good Standing from the secretary of state.

- ATXI is a corporation organized under the laws of Illinois with its principal office at 1901 Chouteau Avenue, St. Louis, Missouri 63103. It is a wholly owned subsidiary of Ameren Corporation (Ameren). ATXI is duly authorized to do business in Missouri. A certified copy of ATXI’s Authority to Conduct Business in the State of Missouri was attached to the Application as Appendix A.
- ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(C) requires if any applicant is a foreign corporation, a certificate from the secretary of state that it is authorized to do business in Missouri.

- This requirement does not apply.

20 CSR 4240-2.060(1) (D) requires if any applicant is a partnership, a copy of the partnership agreement.

- This requirement does not apply.

20 CSR 4240-2.060(1)(E) requires if any applicant does business under a fictitious name, a copy of the registration of the fictitious name with the secretary of state.

- ATXI does not do business under a fictitious name in Missouri.

20 CSR 4240-2.060(1)(F) requires if any applicant is a political subdivision, a specific reference to the statutory provision and a specific reference to any other authority, if any, under which it operates.

- This requirement does not apply.

20 CSR 4240-2.060(1)(G) requires if any applicant has submitted the applicable information as set forth in subsections (1)(B)–(F) of this rule in a previous application, the same may be incorporated by reference to the case number in which the information was furnished, so long as such applicable information is current and correct.

- This requirement does not apply.

20 CSR 4240-2.060(1)(H) requires a brief statement of the character of business performed by each applicant.

- ATXI provides a brief statement in Application Paragraph 3 noting that “ATXI is engaged in the construction, ownership, and operation of interstate transmission lines that transmit electricity for public use. ATXI was first recognized by the Commission as a public utility in File No. EA-2015-0145.”
- ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(I) requires name, title, address, and telephone number of the person to whom correspondence, communications, and orders and decision of the commission are to be sent, if other than to the applicant’s legal counsel. Name, title, address and telephone number of legal counsel and paralegal was provided.

- ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(J) requires if any applicant is an association, other than an incorporated association or other entity created by statute, a list of all of its members.

- This requirement does not apply to ATXI.

20 CSR 4240-2.060(1)(K) requires a statement indicating whether the applicant has any pending action or final unsatisfied judgments or decisions against it from any state or federal agency or court which involve customer service or rates, which action, judgment, or decision has occurred within three (3) years of the date of the application. Other than matters that may be pending before the Federal Energy Regulatory Commission (FERC), ATXI has no pending actions or final unsatisfied judgments or decisions against it from any state or federal court or agency within the past three (3) years involving customer service or rates.

- ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(L) require a statement that no annual report or assessment fees are overdue.

- ATXI has no overdue or unpaid annual reports or assessment fees. ATXI has satisfied this requirement.

20 CSR 4240-2.060(1)(M) requires all applications shall be subscribed and verified by affidavit under oath by one (1) of the following methods: if an individual, by that individual; if a partnership, by an authorized member of the partnership; if a corporation, by an authorized officer of the corporation; if a municipality or political subdivision, by an authorized officer of the municipality

or political subdivision; or by the attorney for the applicant if the application includes or is accompanied by a verified statement that the attorney is so authorized.

- An affidavit providing the authorized officer verification required by 20 CSR 4240-2.060(1)(M) is attached as Appendix B to the Application. ATXI has satisfied this requirement.

20 CSR 4240-20.045

20 CSR 4240-20.045(3)(A) requires the application shall include facts showing that granting the application is necessary or convenient for the public service.

- ATXI has satisfied this requirement.

20 CSR 4240-20.045(3)(B) requires if an asset to be operated or constructed is outside Missouri, the application shall include plans for allocating costs, other than regional transmission organization/independent system operator cost sharing, to the applicable jurisdiction.

- The proposed project include approximately 44 miles of 345 kV transmission line, in two segments, in Worth, Gentry, and DeKalb counties, and a new 345 kV substation named Denny in DeKalb county, referred to as the Fairport-Denny-Iowa/Missouri border (FDIM) Project; and (ii) approximately 9 miles of 345 kV transmission line in Marion county between ATXI's existing Maywood Substation near Palmyra, Missouri, and the Mississippi River Illinois/Missouri border, including upgrades to the Maywood Substation, referred to as the Maywood-Mississippi River Crossing (MMRX) Project.¹
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(3)(C) requires if any of the items required under this rule are unavailable at the time the application is filed, the unavailable items may be filed prior to the granting of authority by the commission, or the commission may grant the certificate subject to the condition that the unavailable items be filed before authority under the certificate is exercised.

- ATXI has not yet determined what assets, permits or other authorizations may be required from any affected governmental bodies in order to commence construction of the New Facilities. If any are required, ATXI will provide them when they are available, consistent with Missouri law, as permitted under 20 CSR 4240-20.045(3)(C).
- Staff has also recommended a condition related to reporting of permits.

20 CSR 4240-20.045(6)(A) requires a description of the proposed route or site of construction.

- ATXI witness Eddings provided a description of the new Denny Substation in direct testimony. A depiction of the site was provided as Confidential Schedule GE-D1 to that testimony. Descriptions of the sites and routes for FDIM and MMRX were provided in the direct testimony of ATXI witness Nicholas. Depictions of the routes were provided in

¹ EA-2024-0302 Application Pg 1.

Appendix E to the Application and discussed in ATXI witness Nicholas' testimony. Additionally, ATXI witness Tara Green's schedules TG-D1 and TG-D2 contain proposed legal descriptions for the routes. Application Appendix E depicts the routes of the FDIM and MMRX routes.

- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(B) requires a list of all electric, gas, and telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, and each underground facility, as defined in section 319.015, RSMo, which the proposed construction will cross.

- This was provided in Appendix C to the Application.
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(C) requires a description of the plans, specifications, and estimated costs for the complete scope of the construction project that also clearly identifies what will be the operational features of the asset once it is fully operational and used for service.

- This information was collectively provided in the direct testimonies of ATXI witness Dencker, ATXI witness Molitor, and ATXI witness Eddings and Schedules TD-D1 (Confidential), AM-D2, and GE-D2 (Confidential). The estimated costs for the complete scope of the Phase 1 Projects and the Program, as well as the portions of the total Phase 1 Projects and Program costs to be allocated to ATXI and to the MISO AMMO Pricing Zone, were provided in the direct testimony of ATXI witness Dencker and ATXI witness Gudeman. ATXI estimates that the total cost to construct the Program, including the Phase 1 Projects, is \$611.1 million. ATXI estimates that its total cost to construct just the Phase 1 Projects is \$120.5 million². These estimates include, respectively, all Program or Phase 1 Projects construction, both transmission line and substation work, as well as needed real estate rights. ATXI excluded the Scope of work at ATXI's Maywood Substation it is not new substation construction.
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(D) requires the projected beginning of construction date and the anticipated fully operational and used for service date of the asset.

- The Phase 1 Projects schedule, including the projected beginning of construction date and the anticipated fully operational and used for service date of the New Facilities, was provided in the direct testimony of ATXI witness Dencker and Schedule TD-D2 to that testimony. ATXI intends to commence construction of the Phase 1 Projects by April 2027 and anticipates that those projects will be in service by June 2028.³
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(E) requires a description of any common plant to be included in the construction project.

² EA-2024-0302 Application Paragraph 36.

³ EA-2024-0302 Application Paragraph 37.

- ATXI anticipates that the only common plant to be included in the Phase 1 Projects is certain communication equipment within the new Denny Substation, which will be used for processing electric data for multiple Ameren subsidiaries.⁴
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(F) requires plans for financing the construction of the asset.

- ATXI's plans for financing the New Facilities were provided and explained in the direct testimony of ATXI witness Gudeman.
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(G) requires a description of how the proposed asset relates to the electric utility's adopted preferred plan under 4 CSR 240-22.

- ATXI is not subject to, and does not have a Preferred Resource Plan under, 20 CSR 20 4240-22, as it is a transmission-only utility and is not an electric utility that sold more than one (1) million megawatt-hours to Missouri retail electric customers in calendar year 2009. Accordingly, the 20 CSR 4240-20.045(6)(G) requirement to describe how the Projects relate to the utility's adopted preferred plan is not applicable to ATXI.

20 CSR 4240-20.045(6)(H) requires an overview of the electric utility's plan for this project regarding competitive bidding, although competitive bidding is not required, for the design, engineering, procurement, construction management, and construction of the asset.

- The overview of ATXI's plan regarding competitive bidding for the design, engineering, procurement, construction management, and construction of the New Facilities was provided in the direct testimony of ATXI witness Dencker.
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(I) requires an overview of plans for operating and maintaining an asset.

- ATXI's overview of plans for operating and maintaining the New Facilities was provided in the direct testimony of ATXI witness Dencker.
- ATXI has satisfied this requirement.

20 CSR 4240-20.045(6)(J) requires an overview of plans for restoration of safe and adequate service after significant, unplanned/forced outages of an asset.

- ATXI's overview of plans for restoration of safe and adequate service after significant, unplanned/forced outages of the New Facilities is provided in the direct testimony of ATXI witness Dencker.
- Additionally, ATXI provided relevant practices, procedures, and/or standards documenting its transmission facilities practices in response to data request 8.
- ATXI has satisfied this requirement.

⁴ EA-2024-0302 Application Paragraph 38.

20 CSR 4240- 20.045(6)(K) requires an affidavit or other verified certification of compliance with the following notice requirements to landowners directly affected by electric transmission line routes or transmission substation locations proposed by the application. The proof of compliance shall include a list of all directly affected landowners to whom notice was sent.

- ATXI provided an affidavit certifying compliance in Appendix D to the Application and listing all directly affected landowners. Additionally, ATXI filed the affidavit of Leah Dettmers on November 8, 2024 per 20 CSR 4240-20.045(6)(K)(4).
- ATXI has provided the required affidavit, Staff notes that landowners along alternative route DO-27 were not notified of the CCN application as further discussed in Staff's Rebuttal Report.

20 CSR 4240-10.105

20 CSR 4240-10.105(1)(A) A brief description of the property involved in the transaction, including any franchises, permits, operating rights, or certificates of convenience and necessity.

- ATXI provided responsive information in paragraph 49 of the Application as well as in Confidential Schedule TD-D4.
- ATXI has satisfied this requirement.

20 CSR 4240-10.105(1)(B) A copy of the contract or agreement of sale.

- ATXI provided a copy of the sales contract in Confidential Schedule TD-D4.
- ATXI has satisfied this requirement.

20 CSR 4240-10.105(1)(C) The verification of proper authority by the person signing the application or a certified copy of resolution of the board of directors of each applicant authorizing the proposed action.

- ATXI provided Appendix B which is an affidavit of Shawn Schukar.
- ATXI has satisfied this requirement.

20 CSR 4240-10.105(1)(D) The reasons the proposed sale of the assets is not detrimental to the public interest.

- ATXI provided reasons the proposed sale of the assets is not detrimental in the Application paragraphs 46, 48, and 49. In general, the Program and the Phase 1 Projects, including the FDIM Project, address system constraints and add needed transmission capacity to the grid. The added capacity ensures grid reliability and resiliency and promotes access across the region to and by a diversifying energy resource mix. The transfer itself lowers the FDIM Project cost to ATXI and Missouri customers, while allowing ATXI to retain day-to-day control of all of the subject transmission assets.
- ATXI has satisfied this requirement.

20 CSR 4240-10.105(1)(E) If the purchaser is subject to the jurisdiction of the commission, a balance sheet and income statement with adjustments showing the results of the acquisitions of the property.

- MJMEUC is not subject to the rate making jurisdiction of the Commission.
- ATXI has satisfied this requirement.

20 CSR 4240-10.105 (F) A statement of the impact, if any, the sale, assignment, lease, or transfer of assets will have on the tax revenues of the political subdivisions in which any structures, facilities, or equipment of the companies involved in that sale are located.

- 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 are not available at this time and will be provided later in this proceeding pursuant to 20 CSR 4240-10.105(3)⁵
- ATXI has satisfied this requirement.

Sections (2) and (3) of the subject rule are not applicable.⁶

⁵ EA-2024-0302 Application Paragraph 49.

⁶ EA-2024-0302 Application Paragraph 50.

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ATTACHMENT B

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY