Exhibit No.: Issue(s): Project Overview, Tartan Factors, Introduction of Witnesses Witness: Shawn E. Schukar Type of Exhibit: Direct Testimony Sponsoring Party: Ameren Transmission Company of Illinois File No.: EA-2024-0302 Date Testimony Prepared: July 16, 2024

## MISSOURI PUBLIC SERVICE COMMISSION

## FILE NO. EA-2024-0302

## **DIRECT TESTIMONY**

## OF

## SHAWN E. SCHUKAR

## ON

## **BEHALF OF**

## AMEREN TRANSMISSION COMPANY OF ILLINOIS

St. Louis, Missouri July, 2024

## **TABLE OF CONTENTS**

I.	INTRODUCTION AND BACKGROUND1		
II.	PURPOSE OF TESTIMONY AND SCHEDULES4		
III.	INTRO	DOUCTION OF OTHER WITNESSES	9
IV.	THE NORTHERN MISSOURI GRID TRANSFORMATION PROGRAM 1		
	A.	Benefits and Need	.13
	B.	Cost	.18
	C.	Route, Siting, and Public Input	. 19
	D.	Construction Work Scope	.21
	E.	MJMEUC Partnership	.24
V.	COMN	ISSION APPROVALS AND WAIVERS	.25
	A.	Section 393.170.1, RSMo and 20 CSR 4240-20.045	.25
	B.	Section 393.190, RSMo and 20 CSR 4240-10.105	.27
	C.	Waiver of Certain Commission Rule Requirements	.27
VI.	OTHE	R REGULATORY COMMITMENTS	.28
VII.	CONC	LUSION	. 30

### DIRECT TESTIMONY

## OF

## **SHAWN E. SCHUKAR**

## FILE NO. EA-2024-0302

1		
1		I. IN I KODUCTION AND BACKGROUND
2	Q.	Please state your name and business address.
3	А.	My name is Shawn E. Schukar. My business address is 1901 Chouteau Avenue,
4	St. Louis, Mis	souri 63103.
5	О.	By whom are you employed and in what capacity?
		John Frank Frank Strand
6	А.	I am Chairman and President of Ameren Transmission Company of Illinois (ATXI).
7	I am also Sen	or Vice President, Transmission for Ameren Services Company (Ameren Services).
8	Ameren Servi	ces provides professional services to Ameren Corporation's (Ameren) transmission-
9	owning subsid	liaries, including ATXI.

10

## Q. Please describe ATXI.

ATXI is dedicated to electric transmission infrastructure investment. Today, ATXI 11 A. 12 owns and operates approximately 560 miles of high voltage electric transmission lines and related 13 facilities in Illinois and Missouri for the purpose of reliably and economically moving electricity 14 across the grid for public consumption. ATXI is a wholly owned subsidiary of Ameren. It is also a 15 transmission-owning member of the Midcontinent Independent System Operator, Inc. (MISO), a 16 member-based, not-for-profit Regional Transmission Organization (RTO) that manages the 17 electric transmission grid within a region that includes portions of Missouri. As relevant to projects 18 in Missouri, ATXI's transmission business is regulated in a comprehensive and complimentary

manner by both the Missouri Public Service Commission (Commission) at the state level and the
Federal Energy Regulatory Commission (FERC) at the federal level.

21

## Q. Please describe Ameren Services.

A. Ameren Services is also a wholly owned subsidiary of Ameren. Ameren Services operates as a centralized services company, and was created to provide shared business and corporate services to Ameren's operating companies, including ATXI.

25

## Q. What are your responsibilities as Chairman and President of ATXI?

A. I manage all aspects of ATXI's business. In this regard, I oversee the development and planning of new transmission for ATXI, including the first phase of the Northern Missouri Grid Transformation Program that is the subject of ATXI's application in this proceeding. I am also ultimately responsible for the operation of ATXI's transmission system and for policymaking related to that system.

## Q. What are your responsibilities as Senior Vice President, Transmission for Ameren Services?

A. Among the many shared services that Ameren Services provides Ameren's operating companies, Ameren Services personnel provide Ameren's transmission-owning utilities—ATXI, Ameren Illinois Company d/b/a Ameren Illinois (Ameren Illinois), and Union Electric Company d/b/a Ameren Missouri (Ameren Missouri)—planning, design, construction, engineering, and other transmission-related services. As the Senior Vice President, Transmission for Ameren Services, I oversee those Ameren Services personnel and the transmission services they provide. I am also responsible for transmission policy and regulatory activities related to

40 transmission on behalf of the Ameren operating companies, including the transmission-owning 41 utilities' participation in the transmission-related aspects of MISO. And I am ultimately responsible 42 for the operation of those utilities' integrated transmission systems, often collectively referred to 43 as the "Ameren Transmission System."

44

## Q. Please describe your professional and educational background.

45 A. I have more than 40 years' experience in the utility industry. I have worked for the 46 Ameren family of companies since 1984, when I joined Illinois Power Company, a legacy utility 47 of Ameren Illinois. I have held leadership positions overseeing, during that time, marketing, 48 trading, and asset management, transmission, distribution and generation management, 49 engineering, regulatory and risk management, and business and corporate planning functions, 50 among others. Related to electric transmission specifically, my oversight has included regulatory 51 and policy, development, operations, project management construction, engineering and planning 52 functions. I am a member of the Edison Electric Institute (EEI) CEO Business Continuity Task 53 Force, Energy Delivery Public Policy Executive Advisory Committee, and EEI Unmanned Aircraft 54 Systems Working Group. I have past served on the SERC Reliability Corporation Board. I have a 55 master's degree in business administration from the University of Illinois at Urbana-Champaign, 56 where I also earned a Bachelor of Science in engineering.

57

## Q. Have you previously testified before the Commission?

A. Yes. I provided testimony on behalf of ATXI in Commission Dockets EA-2018-0327 and EA-2017-0345 (related to the Mark Twain Transmission Project) and Ameren Missouri in Commission Dockets ER-2008-0318 and ER-2007-0002. I have also provided testimony before the Illinois Commerce Commission and FERC.

62

## II. PURPOSE OF TESTIMONY AND SCHEDULES

## 63 Q. What is the purpose of your direct testimony in this proceeding?

64 ATXI, the Missouri Joint Municipal Electric Utility Commission (MJMEUC), and A. 65 Ameren Missouri are working together to build a more reliable and resilient energy grid for the 66 future through the Northern Missouri Grid Transformation Program (the Program). The Program represents the Missouri jurisdictional portion of the first wave, or "Tranche," of MISO's ongoing 67 68 long term transmission planning effort. This proceeding addresses the first phase of the Program 69 (Phase 1), which includes approximately 53 miles of new transmission lines across northern 70 Missouri, as well as a new substation and upgrades to an existing substation. Phase 1 includes two 71 projects: the Fairport-Denny-Iowa/Missouri border (FDIM) Project in Worth, Gentry, and DeKalb 72 counties, and the Maywood-Mississippi River Crossing (MMRX) Project in Marion County 73 (collectively, the Projects or Phase 1 Projects).<sup>12</sup> 74 The FDIM Project represents the Missouri portion of one of the Multi-Value Projects 75 (MVPs) approved by MISO as part of its LRTP Tranche 1 Portfolio for inclusion in the 2021 MISO 76 Transmission Expansion Plan (MTEP21), and was eligible for MISO's Competitive Developer 77 Selection Process. MISO issued a Request for Proposals (RFP) for FDIM in December, 2022. On 78 October 27, 2023, MISO chose ATXI to be the Selected Developer for the FDIM Project and

79 recognized MJMEUC as a project partner. ATXI partnered with MJMEUC on the FDIM Project

<sup>&</sup>lt;sup>1</sup> The FDIM and MMRX Projects are the Missouri portions of 2 of the 18 MVPs included in the Long Range Transmission Planning (LRTP) Tranche 1 Portfolio approved by MISO, as discussed in the direct testimony of ATXI witness Mr. Jeff Dodd. The FDIM Project is part of MISO's Orient–Denny–Fairport MVP and the MMRX Project is part of MISO's Maywood-Meredosia MVP.

<sup>&</sup>lt;sup>2</sup> Phase 2 of the Program is the Denny – Zachary – Thomas Hill – Maywood (DZTM) Project, which was awarded by MISO on April 2, 2024, to ATXI with MJMEUC as a project partner. In general, that Phase includes constructing a new 345 kV transmission line that will connect the FDIM Project and the MMRX Project and also includes constructing a 345 kV circuit between the Zachary and Thomas Hill Substations. ATXI will be filing a separate application for approval of a certificate of convenience and necessity for the DZTM Project.

and will transfer to MJMEUC a 49% interest in the Project (excluding the land for the Denny
Substation) shortly before the project is placed into service.

82 The FDIM Project includes the construction of approximately 44 miles of 345 kV 83 transmission line, in two segments, and a new 345 kV substation named Denny in northwest 84 Missouri, as depicted in the figure below. The first new 345 kV transmission line segment will be 85 approximately 1 mile long and connect Associated Electric Cooperative Incorporated's (AECI) 86 existing Fairport Substation in DeKalb County to ATXI's new Denny Substation approximately 87 one mile away, also in DeKalb County. The second new 345 kV transmission line segment will 88 run from the new Denny Substation approximately 43 miles north to the Iowa/Missouri border, 89 where it will interconnect to a 345 kV transmission line that will terminate at MidAmerican 90 Electric Company's (MEC) existing Orient Substation in Iowa.



92 The MMRX Project represents the Missouri portion of another one of the MVP projects 93 approved by MISO as part of its LRTP Tranche 1 Portfolio. The MMRX Project includes the 94 construction of approximately 9 miles of new 345 kV transmission circuit from ATXI's existing 95 Maywood Substation near Palmyra, Missouri, to the Mississippi River Illinois/Missouri border, as 96 depicted in the figure below. A portion of the MMRX Project involves coordination between ATXI 97 and Ameren Missouri. The MMRX Project also includes upgrades to the Maywood Substation 98 required to integrate the new 345 kV circuit. ATXI witnesses Mr. Molitor and Ms. Dencker will 99 provide additional detail on the configuration in his/her testimony.



Among other benefits, the Program, including the Phase 1 Projects, will support lower energy supply costs for Missouri customers, improve energy reliability for local communities and the surrounding region, promote access to diverse energy resources, and support the growth of economic development opportunities by adding needed transmission capacity in the State. This

will help ensure continued energy reliability and resiliency for Missouri electricity customers. In
this proceeding, ATXI is requesting certain approvals from the Commission to make the Projects
a reality and deliver their many benefits to Missouri electricity customers.

108 The purpose of my direct testimony is to support the Phase 1 Projects and ATXI's requested 109 approvals. Toward that end, my testimony covers four topics. First, I introduce the other witnesses 110 who are providing direct testimony in support of the Phase 1 Projects and ATXI's requests. Second, 111 I provide an overview of the Program and the Phase 1 Projects, including an overview of the need 112 for the Projects and their many benefits to Missouri and the broader Midwest region. Third, I 113 identify the specific Commission approvals ATXI is requesting related to the Phase 1 Projects and 114 I explain, at a high level, why the Commission should grant those approvals. Finally, I address 115 ATXI's other regulatory commitments related to the Phase 1 Projects. I note that ATXI's other 116 witnesses describe the Projects in more detail.

## 117 Q. Are you sponsoring any schedules with your direct testimony?

- 118 A. No.
- 119 Q. Are you offering any legal opinions in your direct testimony?
- A. No. Although I refer to and offer my lay understanding of several Missouri statutes
  and regulations, I am not an attorney and none of my direct testimony is intended to offer any legal
  opinions.

## 123 III. **INTRODUCTION OF OTHER WITNESSES** 124 Q. Who are the other witnesses providing direct testimony in support of ATXI's 125 application in this proceeding? 126 A. The other witnesses and the topics of their testimony are: 127 Jeff L. Dodd, Vice President, Transmission Strategy, Policy, and Stakeholder • 128 Relations, Ameren Services. Mr. Dodd explains how and why the Program, including 129 the Phase 1 Projects, came to be. Specifically, he describes MISO's commitment to 130 reliability and its various transmission planning initiatives. That commitment and 131 certain of those initiatives drove MISO, in collaboration with ATXI and other 132 stakeholders, to identify a regional transmission expansion plan-an updated 133 transmission "backbone" within MISO known as the LRTP Tranche 1 Portfolio (the 134 Missouri jurisdictional portion of which is the Program)-needed to address the 135 reliability implications of the Midwest region's changing energy fleet and the 136 increasing and changing nature of customer demands. The Projects comprise a part of 137 the Missouri portion of that Tranche 1 transmission expansion plan. Mr. Dodd also 138 explains the obligation to construct the Projects. And he explains, at a high level, the 139 regional benefits of the LRTP Tranche 1 Portfolio and how the costs of the portfolio 140 are shared across customers in MISO's Midwest Subregion. 141 Dr. Todd Schatzki, Principal, Analysis Group, Inc.. Dr. Schatzki explains how the • 142 Program, including the Phase 1 Projects, meets the Tartan criteria related to need, 143 economic feasibility, and public interest. He explains the Program would be expected 144 to provide the state of Missouri with many positive economic benefits in excess of its 145 costs, thus demonstrating that the Program is necessary, in the public interest, and

economically feasible. Dr. Schatzki also explains how the Program will serve to advance the State's environmental goals with respect to lower air emissions for Missouri.

- 149 Justin Davies, Director of Transmission Planning, Ameren Services. Mr. Davies • 150 generally explains how the Ameren Services Transmission Planning group, on behalf 151 of Ameren's transmission-owning utilities, including ATXI, studies and plans for the 152 Ameren Transmission System in Missouri. His testimony provides additional support 153 regarding how the Projects meet the Tartan criteria related to need and public interest 154 from an Ameren Transmission System perspective. Mr. Davies also explains Ameren 155 Services Transmission Planning's role in MISO's planning processes and its role in the MISO processes that drove the LRTP Tranche 1 Portfolio and the Projects specifically. 156 157 Additionally, Mr. Davies explains how, as a result of those processes, MISO and the 158 Ameren Services Transmission Planning group determined that the Projects are 159 necessary. Mr. Davies also generally addresses additional reliability and system 160 performance benefits of the Projects.
- 161 Tracy Dencker, Senior Project Manager, Ameren Services. Ms. Dencker is the 162 Project Manager for the Projects, and she addresses aspects of the Projects' 163 construction. She generally explains the scope of the construction work for the Projects, 164 the expected construction cost, and the division of work and cost between ATXI, 165 MJMEUC, and Ameren Missouri as memorialized in a Joint Ownership Agreement 166 with MJMEUC for the FDIM Project and a Joint Use Agreement with Ameren Missouri 167 for the MMRX Project. Ms. Dencker also explains where the Projects' construction 168 will occur relative to the right-of-way for the Projects. She also explains how ATXI,

169	and specifically Ameren Services, who will construct the Projects on ATXI's behalf,
170	are capable of and will effectively manage and supervise construction of the Projects,
171	and the actions that ATXI will undertake to ensure adequate and efficient construction
172	and supervision of the Projects. Finally, Ms. Dencker explains the Projects'
173	construction schedule and in-service dates.

- Adam Molitor, Transmission Line Engineer, Ameren Services. Mr. Molitor explains
   the design specifications for the Projects' transmission lines and support structures. He
   also explains the right-of-way width that will be needed to accommodate the Projects'
   transmission lines, including the easements that will be needed during construction of
   the Projects. Mr. Molitor also explains the specific line work that will be undertaken to
   construct the line segments that collectively comprise the Projects.
- Gregory Eddings, Supervising Engineer, Ameren Services. Mr. Eddings describes
   the substation work for Phase 1 and explains in detail the Projects' one new substation
   project, including the substation construction schedule.
- 183 Greg Gudeman, Director of Transmission Financial & Regulatory Services, • 184 Ameren Services. Mr. Gudeman explains the financing required for the Projects, and 185 the overall Program, and ATXI's ability to finance without adverse financial 186 consequences. His testimony explains how ATXI meets the Tartan criteria related to 187 financial ability and economic feasibility. Mr. Gudeman also explains how costs will be shared across MISO's Midwest Subregion and recovered via ATXI's FERC-188 189 regulated transmission rates from customers in that subregion, including customers in 190 Missouri. He also explains the estimated level of costs that will be borne by all Missouri 191 customers, including Ameren Missouri electric residential customers.

- Tara Green, Real Estate Specialist, Ameren Services. Ms. Green addresses real estate matters concerning the Projects. Specifically, she explains the miles and width of the right-of-way required for the Projects' transmission lines and describes the area traversed by the lines. She also generally explains the land rights that ATXI will need to construct the Projects. And she explains the potential effect that construction of the Projects may have on landowners, and how Ameren Services, on behalf of ATXI, will mitigate that effect.
- 199 Leah Dettmers, Manager of Stakeholder Relations and Training, Ameren • 200 Services. Ms. Dettmers explains ATXI's compliance with certain pre-filing public 201 meetings and notice requirements related to the Projects. Ms. Dettmers also describes 202 ATXI's Public Engagement Team's extensive, multi-phased, multi-faceted, and 203 deductive public outreach process for the Projects, including how that process informed 204 the routes analyzed by, and the proposed route ultimately chosen by, the Routing Team 205 for the Projects' transmission lines. Ms. Dettmers also identifies ATXI's outreach efforts to consult with the pertinent federal, state, and local agencies for other, non-206 207 Commission regulatory approvals that may be required for the Projects.
- James Nicholas, Vice President, National Energy Siting and Permitting Practice,
   TRC Companies, Inc. Mr. Nicholas explains how ATXI's Routing Team selected the
   route that ATXI is proposing for the Projects' transmission lines, which it refers to in
   its application as the "Proposed Route." Related, Mr. Nicholas sponsors Routing
   Studies, which describe in detail the processes, criteria, data, and other information that
   the Routing Team used to analyze potential routes for the Projects' line segments and
   ultimately select the Proposed Route. Additionally, Mr. Nicholas identifies certain

215	criteria along the Proposed Route that may implicate other state and federal
216	requirements related to the Projects' construction along the Proposed Route.
217	IV. THE NORTHERN MISSOURI GRID TRANSFORMATION PROGRAM
218	A. <u>Benefits and Need</u>
219	Q. You testified that Phase 1 of the Program includes the FDIM and MMRX
220	Projects, described those Projects and the Program, and further explained that the Projects
221	are part of MISO's LRTP Tranche 1 Portfolio. Can you further describe the relationship and
222	purpose of the Projects, the Program, and MISO's long range transmission plan?
223	A. Yes. Although the entire Program must be approved and constructed for its benefits
224	to be realized, the facilities included in this filing comprise Phase 1 of the Program. The Phase 1
225	Projects specifically comprise parts of the Missouri portion of a regionally beneficial transmission

226 expansion plan known as the LRTP Tranche 1 Portfolio. The LRTP Tranche 1 Portfolio was 227 identified by MISO, working with other stakeholders, as necessary to address the challenges to the 228 transmission grid in its footprint, which includes a portion of the grid in Missouri, posed by a 229 changing energy landscape. The LRTP Tranche 1 Portfolio, including the Missouri portion, starts 230 to accomplish this by adding needed transmission capacity to the grid. The added capacity ensures 231 grid reliability and resiliency and promotes access across the region to and by a diversifying energy 232 resource mix, in turn reducing costs both for generators and the electric consuming public in 233 Missouri. Notably, the LRTP Tranche 1 Portfolio is the first of several tranches of regionally 234 beneficial MISO transmission expansion plans that address system constraints and will likely be 235 needed to respond to and ready the grid for the changing energy landscape.

236

## Q. What do you mean by the changing energy landscape?

237 A. I mean the significant transformation that the electric industry is experiencing, 238 including in Missouri. Across MISO, state policies, utility resource plans, general environmental 239 awareness, and consumer preferences are driving a cleaner, reduced carbon future. Within this 240 broad footprint the availability of wind, solar, and other distributed and renewable generation 241 resources is therefore expanding, while certain conventional generation resources, like coal 242 generating stations, are winding down or retiring altogether. At the same time, customer demand 243 for electricity as a primary energy source is growing. In addition to increased reliance on electricity 244 generally, we are also seeing evolving types of use cases, such as consumption associated with 245 beneficial electrification programs and electronic data storage. So too must the grid evolve to meets 246 these demands and react to changing conditions and customer expectations.

247

## Q. Why does the transmission grid need to be readied for that change?

A. Just as roads need to be built or expanded over time in response to the demands of our traveling society, so must the electric transmission grid that moves the energy that we all rely on every minute of every day be adapted to meet society's changing needs. The energy industry shift poses complex and urgent reliability challenges for the transmission grid that customers rely on for electricity. Therefore, MISO, Transmission Owners (TOs), states, and other stakeholders responsible for ensuring the reliable and cost-effective delivery of electricity to the public need to work together to respond to the shift if they are to continue to meet their reliability commitments.

255

## Q. Why does the grid need to be readied *now* for the future of energy?

A. Because the industry shift is happening now. Thus, MISO, TOs, states, and other stakeholders must plan today for the future of energy. A transitioning generation fleet and

increasing customer demand for electricity is a present reality, so we must plan accordingly. That
planning cannot be delayed, since transmission expansion plans like MISO's LRTP Tranche 1
Portfolio can take upwards of ten years to complete, from planning to in-service date.

261

## Q. How did the Program come to be?

262 A. The Program, including the Phase 1 Projects, is the culmination of several multi-263 faceted, iterative, stakeholder-informed MISO initiatives to study and address the complex and 264 urgent challenges to the grid posed by the changing energy fleet. Perhaps most notable of these 265 initiatives is MISO's LRTP study, which is the most complex transmission study in MISO's history. 266 MISO undertook the LRTP study beginning in 2019 to identify an updated regional transmission 267 backbone that would ensure a reliable, resilient, and cost-effective transmission system as the 268 resource mix in MISO changes over the next 20 years in response to utility, state, and federal goals 269 and policies toward a reduced carbon future. The LRTP Tranche 1 Portfolio transmission 270 expansion plan, including the Missouri portion that includes the Projects, was specifically borne 271 of the LRTP study. ATXI witness Mr. Dodd explains MISO's transmission planning processes in 272 more detail, including the specific initiatives that precipitated the LRTP Tranche 1 Portfolio and, 273 within it, the Projects.

274

## Q. Do you have any other comments in this regard?

A. Yes. The LRTP Tranche 1 Portfolio is notable because it is just the beginning of the next wave of regional transmission planning. As I mentioned, the LRTP Tranche 1 Portfolio is the first of several anticipated tranches of transmission expansion that will be needed to respond to and ready the grid for the changing energy fleet and increasing customer reliance on electricity. The LRTP Tranche 1 Portfolio is also notable, I believe, for yet another reason. It reflects

280 substantial collaboration among MISO, TOs, including ATXI and Ameren Missouri, states, and 281 other stakeholders toward collectively addressing regional grid challenges, which collaboration 282 benefits customers insofar as it supports the continued development of an economically-efficient, 283 reliable, and resilient transmission grid across the MISO Midwest Subregion.

284

#### Q. How, specifically, does the Program, including the Phase 1 Projects, ready the 285 grid in Missouri?

286 A. The Program will add needed capacity to the Ameren Transmission System in 287 Missouri. This will help facilitate the clean energy transition by promoting Missouri customer 288 access to energy from more diverse resources and permitting generators in Missouri, and beyond, 289 to more efficiently and effectively bring their product to market. It will also ensure sustained and 290 foster improved reliability for Missouri communities as well as support lower energy supply costs 291 into, out of, and within Missouri. As ATXI witness Mr. Davies explains, the Program is designed 292 to accommodate the changing nature of the future grid and addresses identified thermal and 293 voltage-instability issues in Missouri. He also explains that the Program will also enable new 294 generation and facilitate transfers into and out of Missouri, reducing the overall Adjusted 295 Production Cost (APC) for customers. Finally, he explains that MISO found the Program will 296 improve the overall voltage profile of the state, reducing the need to add reactive power resources.

297

#### Q. Did MISO quantify any of these benefits?

298 Yes. As explained by Mr. Dodd, MISO quantified the LRTP Tranche 1 Portfolio's A. 299 benefits on both a Midwest Subregion basis and by MISO local resource zone, including Zone 5, 300 which encompasses the MISO-jurisdictional portion of Missouri, including much of Northern

301 Missouri. MISO specifically quantified minimum and maximum net benefits<sup>3</sup> from regional 302 congestion and fuel savings, avoided capital costs of local resources, avoided transmission 303 investment, resource adequacy savings, avoided risk of load shedding, and decarbonization to the 304 Midwest Subregion totaling \$23.2-52.2 billion and to Zone 5 totaling \$2.2-4.7 billion. MISO 305 further found that these benefits far exceed MISO's estimated cost to implement the LRTP Tranche 306 1 Portfolio transmission expansion plan. MISO identified a benefit-to-cost ratio of the LRTP 307 Tranche 1 Portfolio to the MISO Midwest Subregion of 2.6 to 3.8 times, and to MISO Zone 5 of 308  $3.0 \text{ to } 4.2 \text{ times.}^4$ 

## 309 Q. Are there other benefits of the Program, including the Phase 1 Projects, to 310 Missouri specifically?

311 A. Yes, many. As ATXI witness Dr. Schatzki explains, the Program, including the 312 Phase 1 Projects, will provide certain economic and market benefits to Missouri, including lower 313 wholesale electric energy prices and wholesale energy market payments, and reduced air pollutant 314 emissions. As ATXI witness Mr. Davies explains, the Phase 1 Projects will provide additional 315 reliability and system performance benefits to the Ameren Transmission System that customers 316 rely on for electricity service in Missouri, including resiliency in the face of extreme weather 317 events, through enhanced operational flexibility of the grid and resource sharing across the areas. 318 Additionally, although ATXI has not quantified the related dollars, I would expect the Phase 319 1 Projects to generally provide two other benefits to Missouri. First, transmission projects of this

<sup>&</sup>lt;sup>3</sup> The minimum values reflect 2022 net present values over a 20-year time period using a 6.9% discount rate. The maximum values reflect 2022 net present values over a 40-year time period using a 6.9% discount rate.

 $<sup>^4</sup>$  The benefit-to-cost ratios are based on MISO's calculation of 2022 net present values over a 20-year time period using a 6.9% discount rate.

320 size can reasonably be expected to create jobs and otherwise promote economic development 321 opportunities in Missouri. Second, the Projects will also provide a source of additional revenues 322 for Missouri in the form of property, sales, and income taxes.

323 B. <u>Cost</u>

### 324 Q. What will the Program and the Phase 1 Projects cost to construct?

325 A. ATXI estimates that the total cost to construct the Program, including the Phase 1 326 Projects, is \$611.1 million.<sup>5</sup> ATXI estimates that its total cost to construct just the Phase 1 Projects 327 is \$120.5 million. These estimates include, respectively, all Program or Phase 1 Projects 328 construction, both transmission line and substation work, as well as needed real estate rights. It 329 should also be noted that the estimated Program cost include higher level estimates for certain 330 costs related to the Phase 2 DZTM Project since the specific route for that project has not yet been 331 finalized. ATXI witness Ms. Dencker explains the estimated costs, including how they were 332 derived.

333

### **Q.** Who will pay for the Projects?

A. ATXI will initially fund the FDIM Project's cost. ATXI partnered with MJMEUC on the FDIM Project and will transfer a 49% ownership interest in the FDIM Project to MJMEUC (except substation land for which ATXI will retain 100% ownership and provide MJMEUC an easement) shortly before the FDIM Project is placed into service. For the MMRX Project, ATXI will be ultimately responsible for that Project's cost. Payment responsibility is further explained

<sup>&</sup>lt;sup>5</sup> Program costs, as used in this filing, differ slightly from the total cost of LRTP Tranche 1 Portfolio scope located in Missouri, due to the fact that there is a relatively small amount of work and costs that ATXI is not responsible for constructing or funding (approximately \$15.5 million in upgrades to AECI facilities, based on MISO cost estimates).

339 in the direct testimony of ATXI witness Ms. Dencker. ATXI will later recover its investment via 340 transmission rates approved by FERC. MJMEUC will flow its FDIM Project costs through its own 341 formula rate. Because the Phase 1 Projects are part of a regionally beneficial transmission plan, 342 they are eligible for regional cost sharing, and MISO divided the LRTP Tranche 1 Portfolio into 343 eighteen integrated MVPs for that purpose. In 2022, FERC approved a cost allocation approach 344 for the LRTP MVPs. Consistent with that approach, Missouri customers in the AMMO Pricing 345 Zone will pay for only a portion of the Phase 1 Projects—approximately 7.25% of their total cost— 346 with the remainder to be paid for across MISO's Midwest Subregion. To put these charges into 347 context, the Program's year one cost per electric residential customer will be approximately 348 16 cents per month. ATXI witnesses Messrs. Dodd and Gudeman explain further how the total cost 349 of the Projects are allocated and recovered across the MISO Midwest Subregion, including from 350 customers in Missouri.

351

352

С.

### **Route, Siting, and Public Input**

### Q. Where will the Phase 1 Projects be sited in Missouri?

353 A. The overview map attached to ATXI's Application as Appendix E shows ATXI's 354 Proposed Route for Phase 1. As shown on that map, the FDIM Project will be located in a new 355 single greenfield corridor, though much of the line will parallel other existing linear infrastructure. 356 That corridor will be generally routed south to north across the northwest portion of the State, 357 beginning at the Fairport Substation and crossing through portions of DeKalb, Gentry, and Worth 358 Counties to the Iowa/Missouri border. The MMRX Project will be located in northeast Missouri 359 on and along the northern side of the existing ATXI double-circuit 345/345 kV Mark Twain line 360 from Maywood to a point north of the Palmyra Substation, and along the existing Ameren Missouri

161 kV line (which will be rebuilt as a double circuit 345/161 kV line) from the point north of the
Palmyra Substation to the Mississippi River Illinois/Missouri border. ATXI witness Mr. Nicholas
describes the Projects' Proposed Route in more detail.

364

## Q. Was the Proposed Route informed by public input?

365 A. Yes. As explained by ATXI witnesses Mr. Nicholas and Ms. Dettmers, in April 2024 - following selection of ATXI's FDIM Project proposal by MISO - ATXI conducted its public 366 367 engagement campaign, including an in-person public meeting in each county where the Phase1 368 Projects are located. Based on the information collected at the meetings, which included several 369 landowner suggested re-routes, the ATXI Routing Team re-evaluated the initial routes it had 370 identified and made changes to the FDIM section of the Proposed Route. ATXI witness Ms. 371 Dettmers explains ATXI's public outreach process in depth and attaches to her direct testimony an 372 Engagement Summary detailing ATXI's public engagement efforts and the public input it solicited 373 as a result.

## 374 Q. Generally, how will the Projects affect the land traversed by the transmission 375 lines?

A. As explained by ATXI witness Mr. Nicholas, the goal of ATXI's route selection process was to identify and compare transmission line routes that achieve the aims of the project while minimizing the overall impacts on land use, ecological, and cultural features, including attempting to utilize corridors for the route along or adjacent to existing linear infrastructure, to the extent practical, while also considering economic and technical feasibility. The typical, permanent right-of-way required for the Projects will be 150 feet in width, which is the standard needed to accommodate 345 kV transmission line per National Electric Safety Code (NESC)

383 clearances and ATXI's vegetation management requirements. Accordingly, easements of that width 384 will be needed for most of the Proposed Route for ATXI to safely construct, own, operate, and 385 maintain the Projects. ATXI witnesses Mr. Molitor and Ms. Green explain further the real estate 386 needs for the Projects and the impact of the Projects on the land they traverse.

387

## D. <u>Construction Work Scope</u>

**Q.** Generally, what is the scope of work for the Projects within their right-of-way?

A. The transmission line work consists of greenfield (new) construction and
brownfield (rebuild or repurposing) construction.

The FDIM Project is greenfield, and entails the construction of approximately 44 miles of new 345 kV transmission line, using steel monopole structures, from AECI's Fairport Substation to ATXI's proposed Denny Substation to the Iowa/Missouri border. It also includes construction of the new 345 kV Denny Substation.

The MMRX Project involves greenfield and brownfield construction. For approximately 396 3 miles, ATXI will construct a new single-circuit transmission line adjacent to its existing 397 transmission line. For approximately 6 miles, ATXI will rebuild an existing Ameren Missouri 398 161 kV transmission line within the existing corridor, to a double-circuit with the new 345 kV 399 circuit. There will also be some upgrades to ATXI's Maywood Substation to incorporate the new 400 345 kV line being constructed for the MMRX Project. ATXI witnesses Ms. Dencker, Mr. Molitor, 401 and Mr. Eddings explain this in more detail.

402

## Q. Who, specifically, will build the Projects?

403 A. Ameren Services transmission personnel will manage and supervise construction
404 of the entirety of the Phase 1 Projects on behalf of ATXI and its Program partners. As it does

405 regularly for large transmission construction projects, Ameren Services will employ independent 406 contractors and consultants to construct the Phase 1 Projects. Ameren Services intends to use 407 primarily union contractors. Further, Ameren Services' goal, on behalf of ATXI, is to use 408 subcontractors and material suppliers local to the Project areas, such as local lumber yards, 409 concrete suppliers, and suppliers for miscellaneous items needed during construction of the 410 Projects, to the extent practicable. Ameren Services will also seek to provide opportunities for 411 meaningful participation in the Projects' construction by Minority Business Enterprises (MBE) 412 and minority and women tradespersons, including via programs established by primary 413 contractors. Once the Projects are in service, Ameren Services transmission personnel will also 414 operate and maintain the Projects' facilities. ATXI witness Ms. Dencker explains this further.

# 415 Q. You stated that the Phase 1 Projects' 345 kV transmission lines will require 416 new 150-foot-wide rights-of-way. Is ATXI seeking new easements of that width?

417 A. The FDIM Project will require 150-foot-wide right-of-way for the 345 kV circuit 418 to comply with NESC clearances. ATXI plans to acquire new, 150-foot-wide easements for the 419 entire length of the FDIM section of its Proposed Route, including all necessary and appurtenant 420 land rights, such as rights of ingress and egress and access for vegetation management.

The MMRX Project will also require 150 feet of right-of-way ultimately, but much of or all of the easements required for the new 345 kV circuit will overlap with existing transmission corridor easements. The MMRX Project Maywood to Palmyra section of the Proposed Route will require new 100-foot wide easements, taking advantage of ATXI's existing easements to overlap the new 345 kV corridor to attain the required 150-foot wide right-of-way. Despite overlapping with existing Ameren Missouri easements on the Palmyra to Mississippi River line segment of the

427	MMRX Project, like on the FDIM Project described above, ATXI plans to acquire its own new				
428	150-foot-wide easements for the entire length of the Palmyra to Mississippi River section of it				
429	Proposed Route, including all necessary and appurtenant land rights, such as rights of ingress an				
430	egress and ac	egress and access for vegetation management.			
431	ATXI witness Ms. Green explains further the approach to obtaining new easements for th				
432	Projects in her direct testimony.				
433	Q.	Which utility, specifically, will seek the new easements?			
434	А.	Ameren Services real estate personnel will, on behalf of ATXI, seek new easements			
435	naming ATX	I as grantee. ATXI witness Ms. Green also explains this.			
436	Q.	Do you have any other comments in this regard?			
437	А.	Yes. As ATXI witness Ms. Green explains, ATXI hopes to acquire all necessary land			
438	rights for the	Projects by negotiation. And it is committed to working with landowners toward that			
439	end, to the ex	tent feasible, and to mitigate the impact of the Projects on property interests.			
440	Q.	When will the Projects be constructed?			
441	А.	MISO's completion date for its LRTP Tranche 1 Portfolio transmission expansion			
442	plan is June	2030. To accommodate that in-service date and any contingencies, both Phase 1			
443	Projects are s	cheduled to be in service by June 2028. Ameren Services has developed preliminary			
444	construction	schedules and milestones for each of the Phase 1 Projects which provide reasonable			
445	flexibility to	accommodate any contingencies. ATXI witness Ms. Dencker describes these			
446	activities and	the Phase 1 Projects' construction schedule in more detail. ATXI witness Mr. Eddings			

5

447 also discusses the in service date for the FDIM Project's substation project.

## 448 E. MJMEUC Partnership

## 449 Q. You explained that ATXI partnered with MJMEUC on the FDIM Project. Can 450 you describe the nature and purpose of that partnership?

451 MJMEUC is a municipal joint action energy agency formed under the Joint A. 452 Municipal Utility Commission Act to obtain sufficient, economical electrical power supply, energy 453 management, and transmission services for the benefit of member municipal utilities. ATXI's and 454 MJMEUC's partnership pertains to all facilities within the FDIM Project. In general, ATXI will 455 construct, operate, and maintain these facilities, but will transfer an undivided 49% interest to 456 MJMUEC, with ATXI retaining an undivided 51% interest. ATXI and MJMEUC memorialized 457 their respective commitments in a Joint Ownership Agreement (JOA). In simple terms, the JOA 458 establishes that MJMEUC will contribute 49% of the costs to construct the FDIM Project, as well 459 as 49% of the costs to operate and maintain the FDIM facilities jointly owned with ATXI, with 460 ATXI being responsible for 51% of such costs.

461 The collaboration is mutually beneficial to MJMEUC and ATXI. For example, involving 462 MJMEUC enables them to bring the benefits of the FDIM Project to the members/municipalities 463 they serve. MJMEUC also benefits from ATXI's expertise in construction, operation, and 464 maintenance of transmission projects. ATXI and, in turn Missouri customers, benefit from 465 MJMEUC's lower cost of debt and preferable tax treatment. Thus, the partnership with MJMEUC 466 enables MJMEUC and ATXI to collaborate to provide reliability benefits and economic value for 467 their transmission systems/members/customers, and to use Ameren Services' transmission 468 expertise to construct, operate and maintain those projects, at lower overall costs to each partner 469 (and to the customers who are served by these projects), relative to pursuing such projects on a 470 standalone basis. In fact, the partnership with MJMEUC and its resulting cost benefits was

471	identified by MISO as one of the reasons for its decision to choose ATXI as the transmission
472	developer on the FDIM Project. I also note that ATXI and MJMEUC will also partner on the DZTM
473	Project (Phase 2 of the Program) in the same or similar manner as the FDIM Project.
474	ATXI's partnership with MJMEUC on the FDIM Project is explained in greater detail in
475	the direct testimony of ATXI witness Ms. Dencker.
476	V. COMMISSION APPROVALS AND WAIVERS
477	Q. What approvals is ATXI requesting from the Commission related to the
478	Phase 1 Projects?
479	A. ATXI is requesting approval for the Phase 1 Projects under two specific sections of
480	the Revised Statutes of Missouri, Sections 393.170.1 and 393.190, and two sections of the Code
481	of State Regulations, 20 CSR 4240.20.045 and 20 CSR 4240-10.105. ATXI is also requesting the
482	Commission to waive several requirements of its rules for good cause. I address the approvals and
483	waiver requests below.
484	A. <u>Section 393.170.1, RSMo and 20 CSR 4240-20.045</u>
485	Q. Why is ATXI requesting approvals under Section 393.170.1, RSMo, and
486	20 CSR 4240-20.045?
487	A. It is my understanding that an electric utility without a certificated service area must
488	generally have a line Certificate of Convenience and Necessity (CCN) from the Commission under
489	Section 393.170.1, RSMo, authorizing the utility to construct, own, operate, and maintain electric
490	transmission infrastructure in Missouri. ATXI currently does not serve retail customers or have a
491	CCN that would cover the portions of the Phase 1 Projects' transmission lines and new substation
492	that ATXI will construct, own, operate, and maintain. Accordingly, ATXI is requesting a CCN and

authorization under Section 393.170.1, RSMo, for its Phase 1 Projects facilities. It is my
understanding that 20 CSR 4240-20.045 is a rule adopted by the Commission that outlines the
requirements for applications to the Commission for a CCN pursuant to Section 393.170.1, RSMo.

496

## Q. What does Section 393.170, RSMo, require for issuance of a CCN?

497 A. I am not an attorney; however, it is my understanding that, among other things, 498 Section 393.170 requires an applicant for a CCN to demonstrate that the proposed construction is 499 "necessary or convenient for the public service." It is also my understanding that the Commission 500 has stated that it will apply five criteria in CCN cases to determine whether the proposed service 501 is necessary or convenient for the public service, commonly referred to as the Tartan factors: 502 (1) There must be a need for the service the applicant proposes to provide; (2) The applicant's 503 proposal must be economically feasible; (3) The applicant must have the financial ability to 504 provide the service; (4) The applicant must be qualified to provide the proposed service; and 505 (5) The proposed service must be in the public interest.<sup>6</sup>

506

## Q. Is ATXI providing the required Section 393.170 information?

A. Yes. The collective testimony of the ATXI witnesses that I introduced above provide information demonstrating that the Projects meet the requirements of Section 393.170, RSMo, and the Tartan factors. In sum, as explained throughout that testimony, the Projects are necessary to provide continued adequate, reliable, and efficient electric transmission service to customers in Missouri and the MISO Midwest Subregion. Additionally, Ameren Services transmission personnel, who will construct, operate, and maintain the Projects on behalf of ATXI

<sup>&</sup>lt;sup>6</sup> In re Tartan Energy Co., Report and Order, Case No. GA-94-127, 1994 WL 762882 (Sept. 16, 1994).

513 have demonstrated construction supervisory and managerial experience and expertise, including 514 related to transmission expansion projects of similar magnitude. Finally, ATXI has the financial 515 wherewithal to construct, own, operate, and maintain the Projects.

516

## B. <u>Section 393.190, RSMo and 20 CSR 4240-10.105</u>

## 517 Q. Why is ATXI requesting approval under Section 393.190, RSMo, and 20 CSR 518 4240-10.105?

519 As I previously explained, ATXI partnered with MJMEUC on the FDIM Project A. 520 and, per the JOA, will transfer a 49% interest in that project to MJMEUC (excluding the land for 521 the Denny Substation) shortly before the project is placed into service. It is my understanding that 522 Section 393.190, RSMo, requires Commission approval prior to an electric utility transferring 523 electric transmission infrastructure assets to another entity. Accordingly, ATXI is requesting 524 approval of the proposed transfer to MJMEUC for the FDIM Project facilities. It is my 525 understanding that 20 CSR 4240-10.105 is a rule adopted by the Commission that outlines the 526 requirements for applications to the Commission for the authority to sell, assign, lease, or transfer 527 assets.

528

## C. <u>Waiver of Certain Commission Rule Requirements</u>

529 Q. Is ATXI requesting other relief in connection with its request for a CCN for 530 the Phase 1 Projects?

A. Yes. It is my understanding that the Commission may grant a variance from or waive a requirement of its rules for good cause pursuant to 20 CSR 4240-2.205. Because ATXI will not provide retail service to end-use customers in Missouri and will not be rate-regulated by the Commission, certain requirements in the Commission's rules are neither applicable nor needed

for ATXI and it requests that the Commission waive the depreciation study requirement of 20 CSR
4240-3.175, the reporting requirements of 20 CSR 4240-3.190(1), (2) and 3(A)-(D), the annual
reporting requirement of 20 CSR 4240-10.145, and the rate schedule filing requirement of 20 CSR
4240-20.105, for good cause. ATXI will continue to file with the Commission the annual report it
files with FERC.

540

## VI. OTHER REGULATORY COMMITMENTS

541 Q. Will ATXI comply with all applicable rules and requirements of the 542 Commission regarding construction of the Projects?

A. Yes. As with any transmission project, ATXI and Ameren Services personnel on behalf of ATXI will comply with all applicable rules and requirements of the Commission regarding construction of the Projects, including, specifically, 20 CSR 4240-18.010 governing Safety Standards for Electrical Corporations and adopting certain Parts of the NESC for the construction of electric power lines. ATXI witness Mr. Molitor addresses these requirement in his direct testimony.

## Q. What notice has ATXI provided landowners who are directly affected by the Proposed Route and the new substation for the Phase 1 Projects?

A. ATXI has included with its Application, as **Appendix D**, the verification of that landowner notice required by Commission Rule 4240-20.045(6)(K)(1). A list of the directly affected landowners to whom the notice was sent is provided as a confidential attachment to that appendix. And a copy of the letter that ATXI sent to each directly affected landowner as notice of its application is provided as **Schedule LD-D2** to the direct testimony of ATXI witness Ms. Leah Dettmers.

#### 557 Q. Has the ATXI considered the potential impact of its Proposed Route on 558 historical sites and environmentally delicate areas?

559 A. Yes. Ameren Services on behalf of ATXI assessed the Projects' areas as it concerns 560 the potential impact on historical, environmental, and other similarly sensitive land uses as part of 561 its routing analysis in an effort to minimize any such impact, as discussed in greater detail by ATXI 562 witnesses Ms. Dettmers and Mr. Nicholas. That said, again, taking advantage of an existing 563 Ameren Missouri transmission corridor for a majority of the MMRX section of the Proposed Route 564 and largely paralleling existing infrastructure for the FDIM section has allowed ATXI to mitigate 565 the Projects' potential impact on sensitive land uses.

#### 566 Q. Will ATXI obtain all necessary permits, including environmental permits and 567

## river, stream, and lake crossing permits, prior to any construction requiring those permits?

568 Yes. Ameren Services on behalf of ATXI will obtain all required environmental A. 569 permits, including permits to cross navigable waters from the U.S. Army Corps of Engineers, prior 570 to engaging in construction activities requiring those permits, as discussed by ATXI witnesses 571 Ms. Dettmers and Mr. Nicholas.

#### 572 **Q**. Will ATXI obtain all necessary highway and railroad crossing permits prior to 573 any construction requiring those permits?

574 A. Yes. Again, Ameren Services on behalf of ATXI will obtain all required permits, 575 including any permits required by the Missouri Department of Transportation prior to engaging in 576 construction activities requiring those permits, as discussed by ATXI witnesses Ms. Dettmers and 577 Mr. Nicholas.

## 578 Q. Will ATXI also obtain required local approvals applicable to the Projects 579 before any construction requiring those approvals?

A. Yes. ATXI intends to obtain all required approvals, including for example the county assents required by Section 229.100, RSMo, prior to engaging in construction activities requiring those approvals.

583

## VII. CONCLUSION

Q. What do you conclude regarding the Phase 1 Projects and ATXI's requested
Commission approvals for the Projects?

A. The Commission should approve ATXI's application and grant ATXI the CCN and relief that ATXI requests related to the Phase 1 Projects, which are necessary or convenient for the public service. For the reasons I've explained, the LRTP Tranche 1 Portfolio transmission expansion plan, including the Missouri portion containing the Phase 1 Projects, is critical and will improve reliability in Missouri and the MISO Midwest Subregion, bolster resilience and save customers money.

- 592 Q. Does this conclude your direct testimony?
- 593 A. Yes.

## **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 and Approval to Transfer an Interest in Transmission Assets Under 393.190.1, RSMo relating to Transmission Investments in Northwest and Northeast Missouri.

File No. EA-2024-0302

## AFFIDAVIT

1. My name is Shawn E. Schukar. I am Chairman and President of Ameren Transmission Company of Illinois, the Applicant in the above-captioned proceeding.

2. I have read the above and foregoing Direct Testimony and the statements contained

therein are true and correct to the best of my information, knowledge, and belief.

3. I am authorized to make this statement on behalf of Ameren Transmission Company

of Illinois.

4. Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Shawn E. Schukar

Shawn E. Schukar Chairman and President of Ameren Transmission Company of Illinois

Date: July 16, 2024