Exhibit No.:

Issue(s): Odyssey Switching Station
Witness: Leslie M. Tindall
Type of Exhibit: Direct Testimony
Sponsoring Party: Union Electric Company
File No.: EA-2025-0239

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MISSOURI PUBLIC SERVICE COMMISSION

File No. EA-2025-0239

DIRECT TESTIMONY

OF

LESLIE M. TINDALL

ON

BEHALF OF

UNION ELECTRIC COMPANY

d/b/a Ameren Missouri

St. Louis, Missouri August, 2025

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1		I. INTRODUCTION AND PURPOSE OF TESTIMONY	
2	Q.	Please state your name and business address.	
3	A.	My name is Leslie Tindall. My business address is One Ameren Plaza, 1901	
4	Chouteau Av	venue, St. Louis, Missouri 63103. I work for Ameren Services Company ("Ameren	
5	Services") as	a Project Manager in the Transmission Department. Ameren Services is a subsidiary	
6	of Ameren Corporation ("Ameren") and an affiliate of Union Electric Company d/b/a Ameren		
7	Missouri ("A	meren Missouri" or "Company"), the Applicant in this proceeding.	
8	Q.	What are the duties and responsibilities of your position?	
9	A.	As a Project Manager, I am responsible for the planning, execution, completion,	
10	and operation	nal integration of certain transmission construction projects. I am the Project Manager	
11	for the transi	nission switchyard (to be known as the Odyssey switchyard or "Odyssey Switching	
12	Station") ass	ociated with the Reform Solar Project.	
13	Q.	Please describe your professional background and qualifications.	
14	A.	I obtained my Electrical Engineering bachelor's degree with a minor in mathematics	
15	from Purdue	University Northwest located in Hammond, Indiana. I have been employed with	
16	Ameren Ser	vices since October 2024 as a Project Manager III executing study reports and	
17	Customer a	greements through Customer and Midcontinent Independent System Operator	
18	("MISO") co	emmunications for Generator Interconnection Agreements ("GIA"). In addition to	
19	being the GI	A Project Management Lead, I am also managing my own projects and performing	

- 1 project team meetings, budget forecasting, project sequencing, Customer communications, and
- 2 overall project execution. Prior to my work at Ameren Services, I worked as an Assistant Project
- 3 Manager at J.F. Electric, Inc., a major Midwest electrical contractor, performing project estimates
- 4 to Clients, project cost forecasting, managing crews to execute projects on time to meet the
- 5 required in-service dates, and completing safety evaluations out in the field.
- 6 Q. Have you previously provided testimony before the Missouri Public Service
- 7 Commission ("Commission")?
- 8 A. No.
- 9 Q. What is the purpose of your testimony?
- 10 A. The purpose of my testimony is to provide an overview of the transmission
- interconnection facilities and network upgrades that are associated with the Odyssey Switching
- 12 Station project that will support the Reform Solar Project. I will also describe how the Company
- will execute the project through material procurement, engineering design, project construction,
- and operation of the new Odyssey Switching Station.
- 15 Q. Are you sponsoring any schedules with your testimony?
- 16 A. Yes, I am sponsoring the following:
- Schedule LMT-D1 Draft Generator Interconnection Agreement (Confidential)¹
- Schedule LMT-D2 Plans and Specifications for the Odyssey Substation
- 19 (Confidential)

¹ The scope of work and cost estimates for the switching station are complete and the formal generation interconnection agreement's preparation is underway. The Company anticipates executing the Draft Generator Interconnection Agreement in November, 2025.

1 II. PROJECT DETAILS

- Q. Please describe the transmission work to be completed to connect the Reform Solar Project to the transmission system.
- A. The Reform Solar Project requires a point of interconnection to Ameren Missouri's existing 345 kV system. Specifically, the Company will construct a new switchyard station located on land owned by Ameren Missouri and located directly adjacent to the existing 345 kV Montgomery-Callaway-7 transmission line. The Company designed the switchyard and will construct the switchyard consistent with the above-referenced draft GIA for the Reform Solar Project. The Reform Solar Project is designated in MISO's Generator Interconnection Queue as project J1836.
- Q. Can you provide some additional background information about the Project and the associated renewable development?
- A. Yes. As outlined in the Direct Testimony of Company witness Scott Wibbenmeyer, the Reform Solar Project is a ground-mounted, single-axis tracking photovoltaic solar generation plant with a capacity of approximately 250 MW_{AC}. The Reform Solar Project will include an approximately 200-foot generator lead line that will interconnect to Ameren Missouri's existing 345 kilovolt ("kV") transmission system at the newly constructed Odyssey Switching Station, which like other Ameren Missouri stations will be monitored by the Company's SCADA system. Schedule C to the Application shows a map of the Reform Solar Project site, including specific identification of the location of the Odyssey Switching Station.

1 III. COST DETAILS OF THE PROJECT

Q. What is the anticipated cost of the Odyssey Switching Station? A. The Odyssey Switching Station will require several components necessary to interconnect the Reform Solar Project. Those components include (1) the construction of the Odyssey Switching Station itself, (2) the construction of Transmission Owner Interconnection Facilities ("TOIF") at the Odyssey Switching Station, and (3) line work necessary to split the existing 345 kV Montgomery-Callaway-7 transmission line and re-terminate it at the Odyssey Switching Station. These elements constitute a portion of the Reform Solar Project for which Ameren Missouri is seeking a CCN in this case and are included in the estimated Reform Solar Project costs discussed in witness Wibbenmeyer's Direct Testimony. As outlined in the draft GIA, the estimated cost of the three items listed above is **______**. Figure 2 below, extracted from the draft GIA, shows the breakdown of the various cost elements:

Figure 2.

14 **

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² As noted, the overall Reform Solar Project cost estimates addressed by Mr. Wibbenmeyer's Direct Testimony include other network upgrades to existing transmission facilities apart from construction of the Odyssey Switching Station and connecting it to the existing grid.

Q.	How was the Odyssey	Switching Station	cost determined?

A. Pursuant to MISO's Generator Interconnection processes, design information and a
detailed cost estimate was developed. The cost estimate parameters were quantified in part by
assessing how inflationary demand has affected services, material, and equipment pricing.
Material cost estimates were based on recent proposals from like-kind projects. This includes
proposals for 345 kV breakers, disconnect switches, steel poles, control enclosures and relays, etc.
Similarly, construction cost estimates were based on the total number and general type of each
asset in conjunction with historical values for labor using data from projects of comparable size.
Using this methodology, an estimated cost of **\$17.2** million was derived.

IV. ADDITIONAL INFORMATION ABOUT THE SWITCHYARD

Q. Please describe the station's configuration.

A. The Odyssey Switching Station will be constructed in a ring bus configuration with three-line terminal positions and room for one additional future connection should one be required. The diagram showing the preliminary layout of the station on the parcel is included in Schedule LMT-02 D2 (Confidential) along with more detailed plans and specifications for the station. I estimate that these plans and specs represent a design package that is 40% complete.

Q. What are the planned start of construction and in-service dates for the Odyssey Switching Station?

A. The project schedule calls for the Odyssey Switching Station construction to commence in quarter three of 2026 and for the station to be deemed in-service and able to provide back feed power by June 1, 2027. The in-service date for the overall Reform Solar Project is scheduled for completion in the fourth quarter of 2028.

l Q). Please	describe the regu	latory approva	ıls required	l for this Project.

A. Outside of the CCN, this Project may require federal, state and local permitting, which generally includes items like environmental permits and road-related approvals. Environmental surveys and studies will also be necessary to comply with various environmental laws (Endangered Species Act, Clean Water Act, etc.). Some of those permits may be obtained during the pendency of the CCN case. Others may come later in project development. Ameren Missouri is committed to working with all regulatory authorities to ensure we have all of the necessary permits and approvals to develop the Project and does not anticipate any issues with obtaining the required permits.

Q. How will Ameren Missouri source materials and select contractors for the construction of the Odyssey Switching Station?

A. For this Project, the materials are being procured under existing supplier agreements. The construction work will be contracted via a competitive bidding process seeking contractors to complete the construction. Generally, the sourcing process is comprised of: (i) formation of a contract development team to identify and write the scope of work to be completed, identification of qualified contractors for bidding, and the contractor selection criteria necessary; (ii) evaluation and acceptance of the statements of qualifications and bids received (where applicable); and (iii) negotiation of the terms and conditions most favorable to Ameren Missouri. This rigorous sourcing process assures Ameren Missouri secures market-based, cost competitive equipment, materials, and services for efficient and effective construction.

Q. Please address Ameren Missouri's qualifications to construct, own, and operate the Odyssey Switching Station.

Direct Testimony of Leslie Tindall

A. Ameren Missouri owns and operates thousands of miles of transmission lines and dozens of transmission substations and switching stations. Ameren Missouri will provide operations and maintenance services once the Odyssey Switching Station is complete. Ameren Missouri's affiliate, Ameren Services, maintains a primary control center that will conduct all operational switching and coordination with adjacent and interconnected systems. The control center is staffed around-the-clock by North American Electric Reliability Corporation ("NERC") - certified System Operators with substantial experience performing the Transmission Operator and Balancing Authority tasks. Once the Project is placed into service, it will be continuously monitored through SCADA by the control center. The system operators are required to maintain their certification through a combination of computer based training and live system simulation drills. Ameren Services also maintains backup control centers in the unlikely event that the primary control center must be evacuated to minimize any potential disruption to operating the transmission system. Operation will be compliant with applicable state and federal law, Federal Energy Regulatory Commission ("FERC")-approved NERC Standards and other applicable requirements.

Q. Please provide an overview of Ameren Missouri's plans for maintaining the Odyssey Switching Station.

A. Specifically with respect to substation maintenance, Ameren Missouri maintains in-house substation maintenance expertise as well as operations and maintenance personnel at locations spread throughout Missouri. All transmission substations are inspected routinely and the individual equipment contained therein (breakers, etc.) is subject to an internal substation maintenance strategy setting equipment-specific maintenance expectations. Substation equipment is maintained to meet or exceed requirements set by NERC, and Ameren Missouri maintains documentation verifying this compliance, as well as information documenting the intervals at

- 1 which maintenance activities are performed and the scope of work executed on any maintenance
- 2 projects or visits. Any issues identified during substation inspections will be given a priority as
- 3 provided by internal maintenance standards and a remediation action will be scheduled based on
- 4 that priority.
- 5 Q. Please provide an overview of Ameren Missouri's plans for restoration of safe
- and adequate service after significant, unplanned/forced outages of the Odyssey Switching
- 7 Station.
- 8 A. Ameren Missouri has documented processes governing responses to unplanned
- 9 outages. Ameren Missouri will apply these procedures to the Odyssey Switching Station by clearly
- defining roles and responsibilities across its experienced group of subject matter experts.
- Ameren Missouri operators will monitor the status of the Project 24/7. If an unplanned
- outage occurs, subject matter experts will be assigned to review the outage data, utilize fault
- 13 location information, dispatch field resources for make safe activities and to assess damage, and
- determine material and labor resources necessary for the safest and most efficient restoration.
- 15 Ameren Missouri maintains a close relationship with multiple contract partners and tracks their
- staffing levels on a continual basis. This information is used to determine the best resources to
- 17 respond to the situation. Ameren Missouri also has access to an experienced staff of internal
- lineman that can respond to storm damage if necessary.
- 19 Q. Does this conclude your Direct Testimony?
- 20 A. Yes, it does.

EA-2025-0239

Schedule LT-D1

is Confidential in its Entirety

EA-2025-0239

Schedule LT-D2

is Confidential in its Entirety

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and Certificates of Public Convenience and Necessity Authorizing it to Construct Renewable Generation Facilities.	File No.: EA-2025-0239			
AFFIDAVIT OF LESLIE TINDALL				
STATE OF MISSOURI)) ss CITY OF ST. LOUIS)				
Leslie Tindall, being first duly sworn on his oath, states:				
My name is Leslie Tindall and hereby declare on oath	that I am of sound mind and lawful			
age; that I have prepared the foregoing Direct Testimony; and further, under the penalty of perjury,				
that the same is true and correct to the best of my knowledge and belief.				

<u>Leslie M Tindall</u>
Leslie Tindall

Sworn to me this 29th day of August, 2025.