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MISSOURI PUBLIC SERVICE COMMISSION

File No. EA-2026-0226

DIRECT TESTIMONY

OF

CHRISTOPHER A. STUMPF

ON

BEHALF OF

UNION ELECTRIC COMPANY

d/b/a Ameren Missouri

St. Louis, Missouri
July, 2026

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DIRECT TESTIMONY

OF

CHRISTOPHER A. STUMPF

FILE NO. EA-2026-0226

I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and business address.

A. Christopher A. Stumpf, One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri, 63103.

Q. By whom and in what capacity are you employed?

A. I am employed by Union Electric Company, d/b/a Ameren Missouri ("Company" or "Ameren Missouri"), as Vice President – Engineering, Design and Project Management. My responsibilities and those of my work groups include planning and budgeting capital projects; preparing design and procurement specifications associated with such projects; preparing requests for proposals ("RFP") to be sent out for bids; evaluating bids and selection of vendors; and supervising the construction of capital projects.

Q. Please describe your professional background and qualifications.

A. I joined Ameren Missouri in 2005 as a Project Engineer in Generation Engineering. Before coming to Ameren Missouri, I worked as a Mechanical Engineer at the engineering firm Burns & McDonnell from 2001 to 2005. In 2008, I was promoted to Supervising Engineer in Environmental Project Engineering responsible for the execution of environmental air projects for non-nuclear generation (Power Operations). In 2010, I was promoted to Managing Supervisor in Environmental Project Engineering to lead multi-faceted teams for the execution of large capital environmental projects. In 2013, I took over the Mechanical Engineering department responsible

for major boiler and turbine projects for Power Operations. In 2017, I was promoted to Senior Manager of Project Engineering with responsibility for the execution of Power Operations' capital projects. In 2018, the engineering organizations for Power Operations and Energy Delivery merged into one organization at which point I was promoted to Director, Project Management & Mechanical/Environmental Engineering, with the responsibility to manage Energy Delivery and Power Operations' capital projects. In 2019, I was promoted to the position of Senior Director, Engineering Design and Project Management. I was promoted to my current position of Vice President, Engineering Design and Project Management in January 2025. Much of my career has been in the planning, designing, and execution of large capital projects on utility power plants.

I earned a Bachelor of Science degree in Mechanical Engineering from the University of Southern Illinois University at Carbondale in 2001. I am a licensed Professional Engineer in the state of Missouri and hold a Project Management Professional ("PMP") certificate.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to (a) provide an overview of the proposed 2,100 megawatt ("MW")[1] West Alton Natural Gas Combined Cycle Project (the "Project" or "West Alton NGCC") to be constructed at the site of the Sioux Energy Center, including the reason for the Project's location; (b) explain the Company's approach to developing the Project and outline the status of the Project's development and its schedule; (c) discuss the Project cost estimates; (d) describe Project risks mitigation; (e) outline other pertinent Project details and permitting needed to complete the Project; and (f) address other miscellaneous items pertinent to this CCN request.

Q. Are you sponsoring any schedules?

A. Yes. I am sponsoring the following schedules:

[1] Nominal Rating.

- **Schedule CS-D1** – Description of Project Plans and Specifications.
- **Schedule CS-D2** –Project Cost Estimate (Highly Confidential).
- **Schedule CS-D3** –Project permit list.
- **Schedule CS-D4** –Project in-service criteria (Confidential).
- **Schedule CS-D5** –Contractor Development Services Agreement (Highly Confidential)
- **Schedule CS-D6**– Project Division of Responsibility (Highly Confidential)

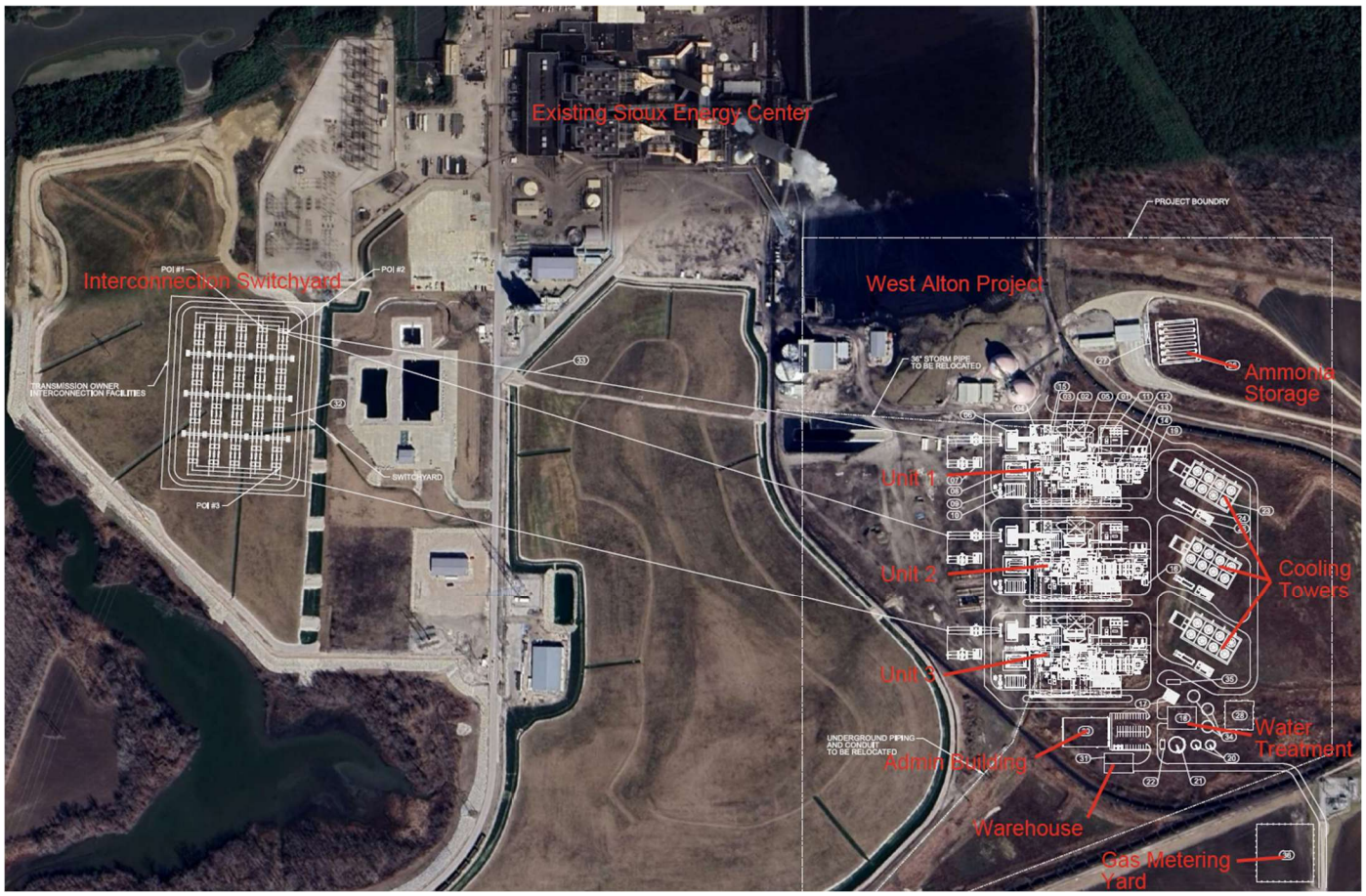
II. OVERVIEW OF THE WEST ALTON PROJECT

Q. Please describe the Project.

A. The Project will consist of three natural gas-fired combined cycle ("NGCC") units. Each unit will be capable of generating approximately 700 megawatts ("MW") and consist of a 1x1, single-shaft advanced-class turbine, an electrical generator, a steam turbine, heat recovery steam generator ("HRSG") equipment, and a wet-cooled forced draft cooling tower. The units will be intended for higher efficiency baseload operations to ensure they are available to operate at a capacity factor of 85% or more.

The Project will also include an office/control service building, water treatment facility, auxiliary boiler, turbine buildings, and a warehouse. The West Alton NGCC will interconnect to the transmission system via a new 345kV switchyard to also be constructed nearby. See Figure 1 below, which is a general arrangement of the NGCC installation, associated facilities, and switchyard at the site.

Figure 1, West Alton Project Site Arrangement



Q. Where is the Project located on the Sioux Energy Center site?

A. The Project will be located to the southeast of the existing coal-fired units. Land already owned by Ameren Missouri at that site will allow for construction of the new facility without impacting continued operations of the Sioux Energy Center.

Q. Does Sioux Energy Center need to retire in conjunction with the Project?

A. No. The Project is being planned and designed as a standalone facility. While new gas generation facilities are essential to providing replacement generation for the eventual planned retirement of Sioux (within a few years after the Project goes into service), the Project does not impact Sioux's operations.

Q. When is the Project expected to go into operation?

A. We expect each unit of the Project to be placed in service in four-month intervals in 2031 (starting in Q2 2031), with the last unit placed in service in Q4.

Q. Why did Ameren Missouri site the Project on the Sioux Energy Center property?

A. The existing property offers several advantages over alternative sites in terms of transmission interconnection, fuel supply, site access, and water resources.

From a transmission standpoint, the Midcontinent Independent System Operator's ("MISO") Long Range Transmission Plan ("LRTP") tranche 2.1 buildout of 345kV transmission infrastructure in northeast Missouri makes the location well positioned to add a new interconnection point near to the existing Sioux switchyard, which can be done without impacting the existing 138kV interconnection for current Sioux Energy Center operations.

The site also benefits from ready access to a reliable fuel supply provided by **_____ _____ ** transmission gas supply pipeline that runs within approximately two miles of the site (the "**_____ **"). The close proximity allows the Project to have a reliable gas supply with construction of **_____ ** adding new gas compression stations along its existing pipeline and a short lateral access to the Project site that limits disruption to landowners. Company witness Andrew Meyer's Direct Testimony discusses the pipeline connection and the Company's firm gas supply plan for the Project in detail.

The site also has established rail access, nearby barge access, and roadways suitable for deliveries of major equipment. This existing infrastructure makes the location well suited for development and overall constructability.

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The Mississippi River serves as a major water source nearby, which will be necessary for reliable operation of the facility.

And, finally, Ameren Missouri currently owns the property, which allows it to timely construct the Project and to take advantage of an existing brownfield site, which also creates access and construction efficiencies. Use of an existing, owned site also allows customers to avoid costs that would have been associated with acquisition of a new site.

III. DEVELOPMENT APPROACH, STATUS, AND PROJECT SCHEDULE

Q. Please describe the Company's approach to developing the Project.

A. Ameren Missouri is self-developing the Project, using what is generally referred to as an Engineer, Procure, Construction Management ("EPCM") approach, which I will describe in greater detail below.

Q. In general, why is the Company using the EPCM approach?

A. The EPCM approach gives the Company greater cost and schedule control in circumstances, such as those that exist today, where qualified, traditional engineering, procurement, and construction ("EPC") contractors are generally unavailable to complete a project on the timeline needed to meet the owner's needs. While traditional EPC contractors may have historically assumed a greater share of project risks, that risk allocation has generally come at a higher potential cost to owners (manifesting itself in higher overhead allocations and profit margin than under an EPCM approach). In the EPCM approach, the owner (generally with assistance from the Engineer of Record) procures the major equipment and takes a greater role in coordinating construction and installation. Specific to the Project, using the EPCM approach will allow the Company to implement the Project in the most cost-effective manner possible to meet the generation need the Company has when that need must be met. Company witnesses Matt Michels,

Andrew Meyer, and Ajay Arora discuss the generation need and the timing of those needs in detail in their Direct Testimonies.

Q. You noted that traditional EPC contractors are generally unavailable for the Project. Please elaborate on why that is the case and what it meant for the contracting strategy for the Project.

A. The primary driver for using the EPCM approach was the severely constrained EPC market for new combined cycle projects. While the default approach would have been to utilize a traditional EPC structure, we learned through the conduct of a formal Request for Information ("RFI") process (and follow-up discussions), that most top-tier EPC contractors were either unavailable or unwilling to pursue the Project on the timeline needed. Specifically, of nine EPC firms contacted through the RFI process, only two expressed potential interest, and ultimately only one was willing to even consider a traditional competitive proposal, i.e., to submit and be bound by a bid in competition with others. This limited participation demonstrated that a competitive EPC procurement process was not practical and would not yield sufficient options to ensure cost discipline or execution certainty.

In addition to limited availability, the two potentially interested EPC firms introduced unacceptable risks. One of them stated that they did not have the project development resources available on our required timeline which caused us significant concern about the schedule and cost certainty. That same company wanted to spend a few months to further diligence the Project on a mutually exclusive basis before making a commitment to the Project. This would have significantly increased the risk of not having a contractor available if that EPC didn't commit after that diligence effort. The other potential EPC contractor who expressed interest created concerns for us related to lack of technical capability and schedule feasibility, among other concerns.

Collectively, these findings indicated that a traditional EPC model would not provide the level of price certainty, schedule alignment, or risk mitigation required for a project of this scale and timeline. Instead, it would likely increase exposure to price increases, delays, scope gaps, and commercial inefficiencies.

Q. Once you determined that traditional EPC contractors were generally not available for the Project, where did you look for alternatives?

A. We knew that there existed well-established local construction firms with significant experience in power-generation projects with Ameren Missouri who have demonstrated track records of providing construction resources more directly aligned with the Project's schedule, labor strategy,[2] and execution needs.

Q. Please identify those firms and outline more specifically how the EPCM approach will work.

A. The EPCM approach being utilized for the Project consists of three primary parties: (1) the owner, Ameren Missouri; (2) an engineer of record ("EOR"), Sergeant and Lundy ("S&L"); and (3) a construction contractor, a joint venture between McCarthy Building Companies, Inc. ("McCarthy") and Alberici Constructors ("Alberici") called McCarthy Alberici Constructors ("MAC-JV"). Schedule CS-D6 (Division of Responsibility ("DOR") and Figure 2 below outline and depict the division of responsibility among the EPCM team members.

[2] In addition to the issues discussed above, both potential EPC contractors also planned to rely heavily on offshore engineering and local subcontracted labor—resources that Ameren Missouri would be able to access directly without added EPC overheads and profit margins by relying on an EPCM approach.

Figure 2

EPCM Approach

As discussed further below, both McCarthy and Alberici are well-established and experienced utility-scale construction contractors based in St. Louis, who have successfully completed large projects for Ameren Missouri (and its affiliates) in the past. As Schedule CS-D6 and Figure 2 indicate, Ameren Missouri will hold a contract with S&L who will act as the EOR and provide engineering, procurement, and commissioning services. Ameren Missouri will also contract separately with MAC-JV to perform the on-site construction services. The MAC-JV contract is currently being negotiated as a target price structure with shared savings and overruns. We are also developing an Integrated Project Delivery Agreement ("IDPA") which will establish shared Key Performance Indicators ("KPI's") between S&L and MAC-JV to incentivize collaboration on shared goals. As mentioned above, S&L will perform procurement services on our behalf, including development of the equipment specifications which, depending on the particular procurement package, will be purchased by Ameren Missouri or MAC-JV in accordance with the DOR.

Q. Please elaborate on why you selected each of S&L, McCarthy, and Alberici for their respective roles?

A. S & L is a well-qualified, global engineering firm with deep experience in NGCC development and who has been serving as Ameren Missouri's Owner Engineer since early development efforts for the Project began in 2022. McCarthy and Alberici bring a complementary combination of experience, resources, and proven execution on some of the nation's largest and most complex construction projects. Together, they offer extensive expertise in large-scale industrial, power generation, infrastructure, and mission-critical facilities, supported by strong self-performance capabilities and rigorous safety programs. Their combined experience managing complex stakeholder environments, large union and craft labor workforces, and challenging construction logistics should also greatly benefit the Project in reducing some of these respective execution risks. They also have deep relationships with the required labor groups in St. Louis for a project of this type, which will be key in making sure the Project has the labor it needs when it needs it.

Q. Please summarize the advantages of the EPCM approach for building the Project.

A. The EPCM approach will:

- **Improve resource availability and execution certainty by using** local construction companies that will increase our ability to obtain necessary craft labor in a constrained labor market;
- **Enhance collaboration** by aligning the owner, EOR, and constructor around common goals through shared KPI's with incentives to improve decision-making and reduce the likelihood of disputes and potentially costly change orders;

- **Provide greater control over design and integration** through the direct engagement of the EOR, which maintains continuity between engineering and construction, reducing design conflicts and constructability issues;
- **Provide lower overall cost** by paying reduced overhead and profit margins demanded by EPC firms; and
- **Provide stronger cost control and transparency** since Ameren Missouri retains the ability to benchmark and validate pricing using independent estimates and market data rather than relying solely on EPC contractor pricing.

Q. What is the status of contracting for the work needed to complete the Project?

A. S&L has been given a limited notice to proceed ("LNTP") on a scope of work, including developing a level 3 engineering and procurement schedule, preliminary equipment datasheets and specifications, and certain drawings. The full EOR contract is currently under negotiation with S&L to provide the full scope of Project design services, as well as the preparation material and equipment specifications for Ameren Missouri and MAC-JV procurement events, technical bid evaluation support, and technical support for Project commissioning activities and equipment-specific operational procedures. MAC-JV and Ameren Missouri have entered into a Development Services Agreement (Schedule CS-D5) under which the parties will complete negotiations on a construction contract (expected to be completed by September 2026). Under the construction contract, MAC-JV's key scope of work responsibilities will consist of full site construction of the Project through mechanical completion of each NGCC unit and balance of plant facilities, as well as site labor support for NGCC unit commissioning activities through substantial completion.

Q. What will Ameren Missouri's key responsibilities, as the Project owner, be?

A. Ameren Missouri will hold the contracts with Mitsubishi for the PIE NGCC equipment, the main generator step-up transformers, station service transformer as well as critical engineered major equipment further defined in the division-of-responsibility matrix included in Schedule CS-D6 that has been developed between Ameren Missouri, MAC-JV and S&L. Additionally, Ameren Missouri will directly contract for the supply and installation of balance-of-plant control system, independent commissioning services, and independent performance testing.

Q. Based on the above descriptions, it sounds like Ameren Missouri is, to a significant degree, responsible for the procurement aspects of the Project, in particular procurement of major equipment. Please outline what procurement steps have been taken in that regard.

A. Ameren Missouri has completed certain early procurement steps for certain equipment with long manufacturing lead times, specifically, the PIE, consisting of the combustion turbines, steam turbines, generators, HRSG equipment, and emissions control equipment. Ameren Missouri completed this procurement via a March, 2025 request for proposal ("RFP") issued to Siemens Energy, General Electric Vernova ("GEV"), and Mitsubishi Power America ("MPWA"). Ameren Missouri did not receive a bid from Siemens Energy. MPWA and GEV both returned proposals on June 6, 2025. MPWA provided the best-evaluated and lowest-cost proposal with delivery times that met the expected construction-schedule needs. Ameren Missouri entered into a Reservation Agreement with MPWA on September 19, 2025. The final contract was executed with MPWA on March 31, 2026 (the "MPWA Supply Contract").

Q. Please describe the PIE.

A. The MPWA Supply Contract includes three sets of the following major equipment:

- 501JAC- Gas Turbines;
- electric generators;
- HRSG equipment that will incorporate Duct Burners and Selective Catalytic Reduction ("SCR") units; and
- steam turbines.

The MPWA Supply Contract also provides delivery to the site, technical field assistance for commissioning the units, as well as guarantees for performance, emissions, and noise. The HRSG equipment supply will be subcontracted by MPWA to Nooter Ericksen, headquartered in Fenton, Missouri.

Q. The 501JAC-Gas Turbine is referred to as an advanced class turbine. What makes this combustion turbine an advanced class and why was this technology selected for the Project?

A. The 501JAC is considered an advanced-class combustion turbine because it incorporates high firing-temperature technology, advanced materials, air-cooled turbine components, and emissions-control design features that support high combined-cycle efficiency, strong operating reliability, and low emissions. The air-cooled design also reduces the complexity associated with steam-cooled turbine designs, which supports operational flexibility and maintainability.

Ameren Missouri selected this technology for the Project because it provides the efficiency, capacity, reliability, and emissions performance needed for a large baseload combined-cycle facility. MPWA's J-Series technology has been commercially deployed since 2011, and according

to MPWA, had accumulated more than 3.2 million commercial operating hours worldwide as of December 2025. This operating experience reflects more than a decade of commercial deployment and supports the demonstrated reliability and performance of the technology. The 501JAC units also aligned with the Project schedule and procurement objectives, as MPWA provided the best-evaluated and lowest-cost proposal among the proposals received, with delivery times that met the expected construction schedule. For these reasons, the technology provides proven combined-cycle performance and operational flexibility that will help the Project reliably meet customer generation needs over its expected service life.

Q. What other equipment has Ameren Missouri procured to-date?

A. Ameren Missouri has placed orders for the Generator Step-up ("GSU") transformers and Station Service Transformers ("SST") as part of a competitive bidding process. These advance orders were also necessary due to the extremely long-lead time for the equipment.

Q. Please outline the Project's development milestones.

A. As noted above, the PIE and some other long lead time equipment have been procured. The following outlines other key development milestones:

Table 1: Preliminary Project Milestone Schedule

Milestone Description	Expected Completion
MISO Large Generator Interconnection study kickoff	Jan 2026
Constructor Cost Estimate	September 2026
Constructor Labor Strategy	September 2026
Constructor Detailed Schedule	September 2026
Detailed Design and Engineering Begins	November 2026
CCN Requested Receipt	May 2027
Construction Air Permit – Expected Receipt	May 2027
Constructor Target Price Submission	May 2027
Constructor Mobilization – On-Site Construction Begins	June 2027
Major Equipment Delivery (3 units)	Mid 2028 thru end of 2029
Unit 1 Targeted Mechanical Completion	2030
Unit 1 Testing and Commissioning Complete	2031
Unit 1 In-service Date	Q2 2031
Unit 2 Targeted Mechanical Completion	2030
Unit 2 Testing and Commissioning Complete	2031
Unit 2 In-service Date	Q3 2031
Unit 3 Targeted Mechanical Completion	2030
Unit 3 Testing and Commissioning Complete	2031
Unit 3 In-service Date (Final unit)	December 2031

Q. Please elaborate on the schedule for the Project.

A As Table 1 indicates, the last unit for the Project is currently targeted to go into service by December 1, 2031. The Project Schedule dates are preliminary, as the detailed schedule is still under development with MAC-JV. Development of the schedule is focusing on Project success in a highly constrained labor market. MAC-JV must ensure the construction site is ready to receive each unit upon delivery and ensure subsequent buildout is accomplished for each respective unit to separately go into service without costly delays.

IV. PROJECT COSTS

Q. What is the estimated cost of the Project?

A. Ameren Missouri's current base-case estimate for the Project is approximately ***_____ *** with a risk adjusted estimate of ***_____ ***.[3] The risk-adjusted estimate reflects uncertainty in the ultimate cost given the current stage of the Project. These estimates are for the entire Project, including the NGCC facility itself (approximately ***_____ ***in the base case), the cost of extending natural gas supply (two-mile lateral; compression) from the **_____ ** to the site (approximately **_____ ** in the base case), and the transmission interconnection costs for the new nearby 345-kV interconnection substation on existing Sioux Energy Center property and other affected transmission system upgrades (approximately ***_____ *** in the base case).[4]

[3] These are "overnight" costs without AFUDC. Company witness Mitch Lansford addresses the Company's request to include CWIP in rate base on the Project, as allowed by SB 4 passed in 2025, and why that approach is beneficial to our customers.
[4] See Schedule CS-D2 for the break down by these functions for the risk-adjusted estimate.

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Q. What is the basis of this cost estimate?

A. As discussed earlier, the RFI process for EPC contractors did not lead to any workable price indications or bids. Consequently, Ameren Missouri took an alternative path to price discovery for a NGCC installation by soliciting multiple independent cost studies from Black & Veatch, Kiewit, S&L, and McKinsey & Company (the "Consultants"). These studies were performed between Q4 2025 and Q1 2026 based upon information the Consultants had available to them at that time. The above-stated base-case cost estimate is informed by these independent studies specifically pertaining to the direct costs of construction which will be the subject of the MAC-JV agreement referenced earlier. Further details of the base and risk-adjusted cost estimates can be found in Schedule CS-D2.

Q. You indicated earlier that definitive contracts with MAC-JV and full notice to proceed for S&L are not yet in place. Does that mean that the above-stated cost estimates may change?

A. Yes, I expect that the estimates will change. As noted, the above-referenced consultants' studies were based on information for a project scope that was not as refined as the scope is today, and on market conditions for labor and other construction inputs from several months ago. As indicated above, S&L is currently engaging in some additional engineering work as we continue to refine the Project. MAC-JV is also expected to provide (in September of this year) an updated Class 3 construction cost estimate, substantiated by cash flow forecasts, a Level 2 schedule, labor strategy, and logistical plans specific to the Project.

Q. What will be the nature of those more current estimates?

A. They will reflect an American Academy of Construction Engineers ("AACE") Class 3 estimate, with an uncertainty band according to AACE of +30% to -20%. In practical terms, this means that the part of the estimate reflecting non-contracted for items (*i.e.*, other than the contracted-for equipment) could reasonably be expected to ultimately cost 30% more to 20% less than the estimate. This is typical for projects of this scope and at this stage of development (*i.e.,* with detailed engineering having not yet begun).

V. PROJECT RISKS

Q. What are the biggest potential risks associated with the Project?

A. A key risk for the Project is the limited availability of engineering, construction management, and skilled craft labor for construction of Project. As previously discussed, Ameren Missouri is mitigating this risk through early procurement of key equipment and use of the EPCM approach, leveraging two well-established St. Louis-based construction firms with significant experience managing large-scale, complex projects, including projects in constrained labor and logistics environments. Delays in receiving regulatory approvals or required permits beyond the dates assumed in the Project schedule would also increase costs and delay meeting the needs the Project addresses. The Company has mitigated this risk by filing this CCN case as soon as it reasonably could but as late in the process as reasonably possible, so that permission to construct can be obtained on time, and by diligently pursuing permits as soon as Project development allows. We are also working with S&L and MAC-JV to develop a Project schedule that optimizes the sequence of activities at the lowest reasonable cost.

Q. Are the contingency allowances in the cost estimates designed to cover all risks that could increase costs?

A. Not in the base case. Contingency allowances are designed to reasonably mitigate unplanned increases due to known or unknown risks, but given that large construction projects span several years, there is always a chance that costs increase more than the contingency allowances cover for reasons beyond Ameren Missouri's control. As noted, we are attempting to provide sufficient contingency in the risk-adjusted estimate to cover the situation where all risks came to fruition, although it is always possible there are other, unknown risks that we simply can't account for.

VI. OTHER PERTINENT PROJECT DETAILS AND PERMITTING

Q. Beyond contracting to implement the EPCM approach, what other key steps must be completed in order to complete the Project and place it into service?

A. Ameren Missouri will need to complete the process for obtaining the required MISO Generator Interconnection Agreement ("GIA") and also must obtain a number of permits, including applicable air and water operating permits. A complete list of permits that we expect will be needed for the Project are contained in Schedule CS-D3.

Q. What is the status of the GIA process at MISO?

A. Ameren Missouri submitted the GIA request to MISO in April of 2025. MISO has already delayed its Definitive Planning Phase ("DPP") timeline and very often is unable to maintain schedule. DPP II and III results and estimates of network upgrade costs are currently scheduled to be completed in 2027. However, as noted, I don't expect the results for any of the DPP milestones to hit those dates, and it could easily be well into 2028 before the final DPP III results are known. Having said that, I understand that Ameren Service Company's Transmission

Planning Department has studies suggesting that the Northeast Missouri MISO LRTP project, which MISO has assigned to Ameren Transmission Company of Illinois ("ATXI") to complete, will alleviate, or greatly mitigate, the necessity of network upgrades that would otherwise be driven by the Project's interconnection. Nevertheless, there are always risks of network upgrades associated with any generation project, as the MISO queue process is complex and unfolds over multiple years, with different generators dropping from, or being added to, the queue over time.

Q. Do you have an opinion as to the relative risk of incurring material network-upgrade costs for the Project at the Sioux site as compared to the risk of incurring such costs elsewhere?

A. I do. The Sioux site has two advantages related to the risk of network upgrade costs. First, the Project will not rely on the existing 138 kV system utilized for the Sioux coal units and thus will not cause the need to upgrade the 138 kV system. Second, MISO's approval of the Eastern Missouri LRTP project is likely to substantially mitigate any network upgrade costs that would otherwise be required. That LRTP project, as I understand it, will greatly increase the transmission system's ability to accommodate the Project's output without the cost of that LRTP project being assigned to the Project. I would expect a similar project at another location lacking an already approved 345 kV LRTP project in the area, to have much greater risk of much higher network-upgrade costs.

VII. MISCELLANEOUS ITEMS PERTINENT TO THE CCN

Q. Please describe the criteria Ameren Missouri recommends for use in determining if the Project is "in-service."

A. The Company recommends use of the in-service criteria attached to this testimony as Schedule CS-D4

Q. The Company's Application in this case seeks a variance to submit plans for the restoration of safe and adequate service for the Project closer to the time the Project goes into service. Why?

A. For the same reasons that the Company sought, and the Commission granted, such a variance in its order resolving File EA-2024-0237 and numerous other generation CCN dockets. Plans for restoration of safe and adequate service will not be complete until final equipment selection and installation are finished, and discussions between Ameren Missouri operations personnel and the Project's contractors and equipment suppliers take place. For those reasons, the Company requests permission to provide the Project plans for restoration of safe and adequate service within 60 days after the date the Project will go into commercial operation.

Q. The Company's Application also indicates that Ameren Missouri is qualified to develop, construct, own, and operate the Project. Please explain why that is true.

A. Ameren Missouri is well qualified to develop, construct, own, and operate a new NGCC energy center given its extensive experience in generation development, established engineering and construction partnerships, and demonstrated operational expertise with steam turbine and gas-fired technologies. The Company's existing generation fleet includes a broad mix of resources—nuclear, coal, natural gas, hydroelectric, wind, and solar—providing Ameren Missouri with the operational experience necessary to manage both baseload and flexible, dispatchable generation resources. This portfolio diversity requires sophisticated system planning, dispatch coordination, and asset optimization, all of which are directly applicable to the successful integration of a new NGCC facility.

Through existing steam turbine operations at baseload fossil-fuel and nuclear energy centers, an existing fleet of 12 combustion turbine sites, and development of the Castle Bluff and Big Hollow Energy Centers, the Company has expertise in:

- multiple turbine technologies and configurations;
- heat rate optimization and performance monitoring;
- flexible operations, including cycling and load-following capability; and
- integration with interstate natural gas pipeline infrastructure.

This direct operating experience substantially reduces the execution risk for a new NGCC project and demonstrates the Company's capability to achieve high levels of reliability and efficiency.

Furthermore, Ameren Missouri maintains a highly skilled workforce with extensive experience in the operation and maintenance of electric generation facilities. The Company employs rigorous safety protocols, preventative maintenance programs, and performance monitoring systems designed to ensure high availability and efficient operations for the new NGCC energy center.

Q. Does this conclude your Direct Testimony?

A. Yes

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 for A Natural Gas Electrical Generation Facility.	))))	File No.: EA-2026-0226

AFFIDAVIT OF CHRISTOPHER A. STUMPF

STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

Christopher A. Stumpf, being first duly sworn on his oath, states:

My name is Christopher A. Stumpf, 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.

/s/Christopher A. Stumpf
Christopher A. Stumpf

Sworn to me this 24th day of July, 2026.

SPECIFICATIONS AND PLANS

Specification	Description	Status
WA-SPEC-000001 PIE Specification	Power Island Equipment to OEM includes Combustion Turbine, Steam Turbine, Generator, Heat Recovery Steam Generator and all ancillary equipment	Awarded
WA-SPEC-000002 GSU	Generator Step-Up Transformers	Awarded
WA-SPEC-000004 SST	Station Service Transformers	Awarded
WA-SPEC-000005 Engineer of Record	Engineer of Record for Design Services, Procurement Services, Construction Oversight, and Commissioning Oversight	In Negotiations
WA-SPEC-000006 GWC	General Works Construction Services	Under Development
Pump Package	Major Pump and Motor Package includes Circulating Water, Boiler Feed Water, Condensate, ECA, TCA, Clearwell Forwarding, Raw Water, Demineralized Water Supply, Closed Cooling Water, and Ranney Well Pumps	Not Started
Condenser	Supply of Condenser and Air Extraction System and Vacuum Pumps	Not Started
Steam Turbine Bypass	Steam Turbine Bypass System including Cold Reheat, Hot Reheat, and Low Pressure to Condenser	Not Started
Ranney Wells	Ranney Well System including installation	Not Started
Auxiliary Boiler	Supply of Auxiliary Boiler	Not Started
Power Distribution Centers	Power Distribution Center includes Medium Voltage and Low Voltage Switchgear and Breakers and miscellaneous associated electrical equipment	Not Started
Distributed Control System (DCS)	Distributed Control Systems including logic programming for Balance of Plant Equipment and HRSG, Duct Burners, SCR and integration into OEM control system, including plant simulator	Not Started
Valves	Includes control valves, large bore and small bore valves, and operators	Not Started
Fire Protection System	Fire Protection System for Balance of Plant including design and installation of underground fire protection piping, fire pumps, valves, and sprinkler system and fire detection system and monitoring system	Not Started
Pre-Engineered Metal Buildings	Pre-Engineered Metal Buildings including boiler feed pump enclosures, guard house, water treatment building, administration building, and warehouse	Not Started
Cranes	Turbine Building Cranes, miscellaneous hoists	Not Started
Tanks	Raw Water, Service Water, Demineralized Water, Blowdown, Drain Tanks, Vacuum Flash, and Fire Water Tanks	Not Started
Coatings	Painting and Coatings	Not Started
Potable Water Systems	Potable Water Systems including eye wash stations, showers, storage tank, filters and softeners	Not Started
Demineralized Water System	Dual Pass Reverse Osmosis Trains, UF Prefilters, Backwash Pumps, Biocide Pumps, Caustic Pumps	Not Started

Specification	Description	Status
Clarifiers	Clarifiers and other water treatment equipment	Not Started
Cooling Towers	Cooling Tower supply and installation services	Not Started
Chemical Feed	Cooling Tower and HSRG Chemical Feed and Sampling Systems including feed pumps and sampling panels	Not Started
Closed Cooling Water System	Closed cooling water systems including heat exchangers and head tanks	Not Started
Aqueous Ammonia System	Aqueous Ammonia System for SCR includes ammonia storage tank, forwarding pumps, and unloading station	Not Started
Compressed Air System	Compressed Air system including air compressors, air dyers, filters, and receivers	Not Started
SCR Recirculation Fans	SCR Hot Gas Recirculation Fans and Motors for Ammonia Injections	Not Started
Natural Gas System	Natural Gas system including gas chromatograph, start up heater, drain tanks, and pressure control systems	Not Started
Relay Panels	Relay protection control cabinets and metering	Not Started
Iso-Phase Bus	Isolated Phase Bus Duct	Not Started
Non-Segregated Bus	Non-Segregated Phase Bus Duct	Not Started
Emergency Diesel Generator	Emergency Diesel Generator	Not Started
Security System	Security Systems including CCTV, Gate Openers, Card Readers	Not Started
Cathodic Protection	Cathodic Protection supply and installation services	Not Started
Heat Trace	Heat Tracing cable and control panels	Not Started
Vibration Monitoring	BOP Vibration Monitoring System including probes, sensors, and other monitoring systems	Not Started
Instrumentation	BOP Instrumentation including field devices	Not Started
Sanitary Sewer System	Includes sanitary lift station and drain field installation	Not Started
Continuous Emissions Monitoring System	Continuous Emissions Monitoring System includes building for analyzes, probes, umbilical cables	Not Started
On-Site QA/QC Testing	Includes civil inspections, concrete testing, weld inspections, and other miscellaneous field inspections	Not Started
Commissioning	Commissioning Services including relay testing, electrical equipment testing, mechanical equipment check-out, and associated documentation	Not Started
Operator Training	Operator Training for overall plant operation and BOP equipment, not including PIE OEM equipment	Not Started
Performance Testing	Performance Testing of PIE OEM equipment, emissions testing, BOP equipment performance testing	Not Started

* The list above represents the anticipated scopes of work and specifications to be developed for the West Alton Combined Cycle project for equipment and services provided by Ameren

Missouri. These scopes of work may be broken into additional distinct parts and pieces depending on capabilities of suppliers.

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Schedule CS-D2

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PERMIT MATRIX***

Agency	Permit or Regulatory Scope
Missouri Department of Natural Resources (MoDNR)	Clean Air Act, Construction Air Permit*
Missouri Department of Natural Resources (MoDNR)	Land Disturbance
US Army Corps of Engineers (USCACE)	Clean Water Act, Section 404 - Wetland and Stream Impacts
US Army Corps of Engineers (USCACE)	Rivers and Harbors Act, Section 10 – Structures or Work withing Waters of the US
US Army Corps of Engineers (USCACE)	Rivers and Harbors Act, Section 408 – Structures or Work near or within Regulated Levee
Federal Aviation Administration (FAA)	Obstruction Evaluation For Permanent Structures
Federal Aviation Administration (FAA)	Use of Temporary Construction Crane
City of West Alton	Land Use
City of West Alton	Floodplain Development
City of West Alton	Building Permit(s)
Missouri Department of Transportation (MoDOT)	Highway Permits
Midcontinent Independent System Operator (MISO)	Generator Interconnection Agreement**

*Construction Permit will be Rolled into Operating Permit after Commissioning

** MISO interconnection required

***As the Project Design Matures, it is Possible that Other Permits May be Required

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