BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

)

)

In the Matter of Staff's Investigation of Matters Concerning the Rush Island Energy Center Belonging to Union Electric Company d/b/a Ameren Missouri.

File No. EO-2022-0215

AMEREN MISSOURI MONTHLY REPORT

COMES NOW Union Electric Company, d/b/a Ameren Missouri ("Ameren Missouri" or the "Company") and provides its monthly report on the Rush Island Energy Center ("Rush Island"), below.

1. On February 15, 2022, the Missouri Public Service Commission ("MPSC") issued an order in this docket requiring Ameren Missouri to file monthly reports on the status of the proceedings at the federal court as well as the status of its planning for the retirement of Rush Island. These reports are due on the 15th of each month.

United States District Court for the Eastern District of Missouri Update

2. On September 30, 2023, the District Court entered its order establishing a retirement date for the Rush Island Energy Center of October 15, 2024. On May 1, 2024, the Department of Justice and the Company submitted competing proposals for mitigation relief in the form of proposed orders. The Court granted Ameren Missouri's request to refer the matter to mediation, which will occurred earlier this month. If a resolution is not reached, an evidentiary hearing has been scheduled for September 19, 2024.

Proceedings at Federal Energy Regulatory Commission and at the Midcontinent Independent System Operator

3. On July 26, 2024, the Midcontinent Independent System Operator, Inc. ("MISO") submitted for Commission approval a third System Support Resources ("SSR") agreement by and between MISO and Union Electric d/b/a Ameren Missouri ("Third SSR Agreement"). The Third

SSR Agreement is similar to two previous SSR agreements filed by MISO and approved by the Federal Energy Regulatory Commission ("FERC"). The previous agreements ran for a period in 2023 and 2024 (September 1 through August 31). The Third SSR Agreement covers the forty-five day period, September 1, 2024 through October 15, 2024.

As MISO explains in its July 26, 2024, filing of the Third SSR Agreement, an SSR designation is a last resort measure to maintain reliability, but must be terminated based on a September 2023 U.S. District Court of Eastern Missouri order that operation of Rush Island units terminate no later than October 15, 2024 rather than completion of the needed transmission upgrades. MISO further explains that expected system conditions have improved since the Rush Island units were evaluated in 2023, and the installation of the fourth STATCOM should be installed before the warm weather reliability problems occur in 2025.

4. In August of 2024, Rush Island unit 1 operated for 100 hours, producing 38,499 MWhs of net generation. Rush Island unit 2 operated for 111 hours, producing 41,166 MWhs of net generation. Rush Island unit 1 experienced a failure of the 1B circulating water pump due to a ground fault in the motor on June 5, 2024. The unit was offline at the time of failure and there was no immediate impact on generation. Rush Island unit 1 remained available for an SSR start. The associated unit derate is determined by river temperature and level. If the river temperature is 89 degrees Fahrenheit, a derate of 118 megawatts would be expected. If the river temperature is 74 degrees Fahrenheit, a derate of only 50 megawatts would be expected. When the river temperature falls below 50 degrees Fahrenheit, expected this fall, no derate is expected. The Company engaged MISO regarding repair consideration and MISO did not instruct the Company to complete repair of the water pump, given the variable derate amount and the short time remaining until expected retirement.

Rush Island Energy Center Retirement Planning Update

5. Transmission Planning - As previously reported, the projects that must be

completed as part of the Rush Island retirement are as follows:

- Replacement of an existing transformer with a larger transformer at Ameren Missouri's Wildwood substation,
- Installation of a capacitor bank at Ameren Missouri's Overton Substation,
- Upgrade of the substation bus at Rush Island's switchyard, and
- Installation of four Static Compensators (STATCOM) in and around the St. Louis region.
- 6. Also as reported previously, there are certain other projects to be completed to meet

Ameren Missouri's local transmission planning criteria with the retirement of Rush Island, but the

Rush Island retirement will be independent of these projects going into service:

- Reconductoring 50 miles of conductor on the 345 kV Coffeen to Roxford transmission line,
- Retap of the current transformers as well as installation of new metering equipment at the 138kV Hannibal West substation,
- Raising two structures on the 138kV Neoga-Effingham Northwest transmission line and installing new shunts on the entire line, and
- Constructing a new 138kV transmission line from Beehive to Dupo Ferry and expanding the capacity of the existing Ameren Illinois Dupo Ferry and Beehive substations to accommodate the new line.
- 7. Progress on the required projects (listed in paragraph 5 above) is described below.
 - Installation of a larger transformer at Ameren Missouri's Wildwood substation is now complete.
 - Installation of a capacitor bank at Ameren Missouri's Overton Substation was completed in March 2024.
 - Upgrade bus conductor at Rush Island switchyard this project was completed in December 2023.
 - Installation of four STATCOMS in and around the St. Louis region the current schedule calls for three of the STATCOMs to be in-service by December of 2024. Construction is underway. The final STATCOM is planned to be in-service by June of 2025. Design is complete. Civil and electrical contractors have been selected. Construction began in April 2024.

Ameren Missouri has secured accelerated STATCOM procurement, but the actual construction and delivery of the STATCOM devices is performed by Ameren Missouri's vendors.

• The required projects have all been approved by MISO. Ameren Missouri asked for some additional projects to be approved under MISO's expedited project review process in 2023. These additional projects were approved and were incorporated into MTEP23 in December 2023.

8. **Operational Planning** – Ameren Missouri started operating under the MISO SSR agreement and associated Operating Guide on September 1, 2022. Since the agreement began, the Rush Island SSR reliability commitments have been as expected, with the units only running during times of MISO need, mostly anticipated to be during summer or winter conditions. We have reduced our O&M and capital budgets for 2023-2025 to reflect that change. We have reached an agreement with the union that will govern how individuals are transferred to other energy centers. The transfers to other facilities will begin in June of this year, with the remainder occurring throughout the year. The plan is to retain approximately 30 employees at Rush Island for safe closure activities.

9. As Ameren Missouri has reported previously, the Company continues to work on multiple operational issues that will have to be addressed both during the transition and after retirement of the plant, including creating staffing plans, appropriately adjusting operations and maintenance expenditures and capital investment to reflect retirement of the plant, inspecting remaining inventory to see what is usable elsewhere, and making plans to leave equipment at the plant in safe condition (draining oil, water, etc.), to name a few. Ameren Missouri started with the shutdown plans it developed for the Meramec Energy Center and is modifying them for Rush Island.

WHEREFORE, Ameren Missouri requests the Missouri Public Service Commission accept this filing as compliant with the order to file monthly status reports.

Respectfully submitted,

/s/ Wendy Tatro

Wendy K. Tatro, Bar #60261 Director and Assistant General Counsel William D. Holthaus, Jr., Bar #63888 Senior Corporate Counsel Ameren Missouri P.O. Box 66149 (MC 1310) 1901 Chouteau Avenue St. Louis, MO 63166-6149 (T) 314-554-3484 (F) 314-554-4014 AmerenMOService@ameren.com

/s/ James B. Lowery

James B. Lowery, MO Bar #40503 JBL Law, LLC 3406 Whitney Ct. Columbia, MO 65203 Telephone: (573) 476-0050 lowery@jbllawllc.com

Attorneys for Union Electric Company d/b/a Ameren Missouri

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing was served on the Missouri Public Service Commission Staff and the Office of the Public Counsel via electronic mail (e-mail) on this 13th day of September, 2024.

/s/ Wendy Tatro

Wendy Tatro