

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
File No. ER-2022-0026, Tariff Tracking No. YE-2022-0025
Union Electric Company, d/b/a Ameren Missouri

FROM: Brooke Mastrogiannis, Utility Regulatory Supervisor
Amanda C. Conner, Utility Regulatory Auditor

DATE: /s/ Brooke Mastrogiannis 09/08/2021 /s/ Casi Aslin 09/08/2021
Energy Resources Department/Date Staff Counsel's Office/Date

SUBJECT: Staff Recommendation for Approval of Tariff Sheet Filed to Change Rates Related
to Ameren Missouri's Fuel Adjustment Clause for the 37th Accumulation Period

DATE: September 8, 2021

On July 30, 2021, Union Electric Company, d/b/a Ameren Missouri ("Ameren Missouri" or "Company") filed one (1) tariff sheet, 4th Revised Sheet No. 71.15, bearing a proposed effective date of October 1, 2021 and cancelling 3rd Revised Sheet 71.15. In the July 30, 2021 filing, Ameren Missouri included \$8,042 in the actual net energy costs and 309,587 kWh in the accumulation period sales for the electricity used near the Sioux plant to mine Bitcoin. Given that this is a new and complex issue, the Company and Staff have agreed to the terms in the Stipulation and Agreement filed on September 8, 2021, which prompted the substitute tariff filing. On September 8, 2021, Ameren Missouri filed a substitute tariff sheet¹ and submitted to Staff work papers in support of the substitute tariff sheet. In Ameren Missouri's substitute filing it explained that the company's initial filing included the costs and kWh's of purchasing energy associated with the digital currency mining research and development project; however, the Company revised the FAC rate calculation to not include such costs and associated kWh's. The Commission assigned the new tariff sheet Tariff Tracking No. YE-2022-0025. The 4th Revised Sheet No. 71.15 revises Ameren Missouri's Fuel Adjustment Rates ("FARs") of its Fuel Adjustment Clause ("FAC") for Accumulation Period 37 ("AP37"), which ended on May 31, 2021. Staff recommends that the Missouri Public Service Commission ("Commission") approve 4th Revised Sheet No. 71.15, as substituted September 8, 2021.

Ameren Missouri's July 30, 2021 filing includes the testimony of J. Neil Graser, Manager of Power and Fuels Accounting at Ameren Services Company, and associated work papers. The testimony and work papers include information and data that supports Ameren Missouri's calculation of its Fuel and Purchased Power Adjustment ("FPA"). That dollar amount ("FPA Amount") is \$36,784,081 and is reflected on line 5 of 4th Revised Sheet No. 71.15. This

¹ Except as otherwise stated, all references herein to the tariff sheet in Tariff Tracking No. YE-2022-0025 shall be to the substitute proposed tariff sheet that Ameren Missouri filed September 8, 2021.

FPA Amount results in a FAR₃₇² of \$0.00178 per kWh, which when added to the FAR₃₆³ of \$0.00214 per kWh, results in a proposed FAR⁴ of \$0.00392 per kWh. The proposed AP37 FAR of \$0.00392 per kWh on line 11⁵ of 4th Revised Sheet No. 71.15 is \$0.00101 per kWh more than the AP36 FAR of \$0.00291 per kWh on line 11 of the 3rd Revised Sheet No. 71.15.

Calculation of Total Company Fuel and Purchased Power Difference

Ameren Missouri's work papers for AP37 contain data and calculations for Actual Net Energy Costs ("ANEC")⁶ of \$154,376,725 (line 1 of proposed 4th Revised Sheet No. 71.15) and Net Base Energy Costs ("B")⁷ of \$117,048,948 (line 2 of proposed 4th Revised Sheet No. 71.15). For this filing, B equals sales of 10,029,901,266 kWh for October 2020 through January 2021 multiplied by the Base Factor ("BF") of \$0.01167⁸ per kWh. The difference between ANEC and B is \$37,327,778 and is the amount on line 3 of 4th Revised Sheet No. 71.15, Total Company Fuel and Purchased Power Difference.

Calculation of FPA Amount

Ameren Missouri's work papers and 4th Revised Sheet No. 71.15 show the FPA Amount⁹ of \$36,784,081 to be the sum of:

1. Fuel and purchased power amount to be recovered from customers for AP37 of \$35,461,389¹⁰ (line 4 on proposed 4th Revised Sheet No. 71.15); plus
2. Interest of \$546,949, which is \$33,612 for AP37 plus \$513,337 for Recovery Period 34 ("RP34") (line 4.1 of proposed 4th Revised Sheet No. 71.15); plus

² FAR_{RP} is defined in Original Sheet No. 71.7 as "FAR Recovery Period rate component calculated to recover under- or over-collection during the Accumulation Period that ended immediately prior to the applicable filing." Since this filing followed Accumulation Period 37, FAR_{RP} in this recommendation is referred to as FAR₃₇.

³ FAR_(RP-1) is defined in Original Sheet No. 71.7 as "FAR Recovery Period rate component for the under- or over-collection during the Accumulation Period immediately preceding the Accumulation Period that ended immediately prior to the application filing for FAR_(RP)." Since this filing followed Accumulation Period 36, FAR_(RP-1) in this recommendation is referred to as FAR₃₆.

⁴ FAR is defined in Original Sheet No. 71.7 as "Fuel Adjustment Rate applied to retail customer usage on a per kWh basis starting with the applicable Recovery Period following the FAR filing." Therefore, FAR = FAR_(RP) + FAR_(RP-1).

⁵ Since the Preliminary Fuel Adjustment Rate ("PFAR") on line 9 did not change after the PISA calculations Rate Adjustment Cap ("RAC") on Line 10, line 9 is carried to line 11.

⁶ ANEC = fuel costs (FC), plus purchased power costs (PP), plus net emission allowances (E), plus or minus net insurance recoveries (R), minus off-system sales revenues (OSSR), as reflected on line 1 of 4th Revised Sheet No. 71.15.

⁷ B = Base Factor multiplied by the accumulation period sales as reflected on lines 2, 2.1 and 2.2 of 4th Revised Sheet No. 71.15.

⁸ Winter Base Factor ("BF_{Winter}") rate on 4th Revised Sheet No. 71.15 of \$0.01167 per kWh was used for the months of February 2021 through May 2021 to calculate B (line 2 of 4th Revised Sheet No. 71.15). FAR_{BF} is defined in Original Sheet No. 71.6 as "Base Factor". The Base Factor (BF) is multiplied by the kWh data to determine line 2 of 4th Revised Sheet No. 71.15.

⁹ 4th Revised Sheet No. 71.15, lines 1 through 5 include the complete calculation of the FPA Amount of \$36,784,081.

¹⁰ Fuel and purchased power amount to be recovered from customers for AP37 is equal to ninety-five percent (95%) of \$37,327,778 (the difference between ANEC and B during AP37).

3. The true-up amount, without interest, of \$775,743 (line 4.2 of proposed 4th Revised Sheet No. 71.15). This amount is pending Commission approval in File No. EO-2022-0027.

Calculation of FAR₃₇

FAR₃₇ of \$0.00178 per kWh is equal to the FPA Amount of \$36,784,081 divided by the Estimated Recovery Period Sales in kWh of 20,659,039,455 kWh, according to Ameren Missouri’s commercial pricing node.¹¹ FAR₃₇ will apply during Recovery Period 37 (“RP37”), which is Ameren Missouri’s billing months of October 2021 through May 2022.

Calculation of FAR Without Voltage Level Adjustments

Line 9 of Ameren Missouri’s proposed 4th Revised Sheet No. 71.15 reflects a FAR of \$0.00392 per kWh which is the sum of: (1) FAR₃₇ of \$0.00178 per kWh and (2) FAR₃₆ of \$0.00214 per kWh.

	Proposed AP37 FAR 4th Revised Sheet No. 71.15	AP36 FAR 3rd Revised Sheet No. 71.15
Line 7. Current Period Fuel Adjustment Rate (FAR _{RP})	\$ 0.00178/kWh	\$0.00214/kWh
Line 8. Prior Period Fuel Adjustment Rate (FAR _{RP-1})	\$0.00214/kWh	\$0.00078/kWh
Line 9. Fuel Adjustment Rate (FAR)	\$ 0.00392/kWh	\$0.00291/kWh

Voltage Level FARs

Because of a difference in line losses,¹² there are different FARs for service taken at the Secondary and Primary voltage levels, reflected on lines 13 and 15 of proposed 4th Revised Sheet No. 71.15. The AP37 FARs are in the table below:

Service	Proposed AP37 FAR	Line on 4th Revised Sheet No. 71.15
Secondary	\$0.00414 /kWh	22
Primary	\$0.00401 /kWh	23

¹¹ MISO’s Market Settlements Business Settlements Practice Manual, BPM-005-r19 Effective Date: FEB-08-2020. The CPNode represents the next hierarchical level in the Commercial Model and consists of one or more EPNodes. All energy transactions, both physical and financial, are financially settled at the CPNode level. Operating Reserve supply is financially settled at the Resource CPNode level based on the appropriate CPNode MCPs. All Market Settlement activity is performed at a CPNode and is the level where LMPs and MCPs are publicly available.

¹² Secondary and Primary Voltage Adjustment Factors are shown on lines 12 and 14, respectively, on Ameren Missouri’s proposed 4th Revised Sheet No. 71.15.

Listed below are the proposed AP37 FARs, the current AP36 FARs, and the difference between them for Secondary and Primary service:

Service	Proposed AP37 FAR	Current AP36 FAR	Difference
Secondary	\$0.00414/kWh	\$0.00308/kWh	\$0.00106/kWh Increase
Primary	\$0.00401/kWh	\$0.00298/kWh	\$0.00103/kWh Increase

Based on a monthly usage of 1,000 kWh, the proposed change to the Secondary FAR would increase the Fuel Adjustment Charge of an Ameren Missouri residential customer's monthly bill by \$1.06, from \$3.08 to \$4.14 per month.

In his filed testimony, Company witness J. Neil Graser explains the FAR's increase:

The primary factors driving this increase above net base energy costs (Factor B) were higher purchased power costs for load, lower off-system sales margins, and lower net capacity revenues, as compared to Factor B. Purchased power costs increased primarily as a result of purchasing additional energy from the market at elevated prices due to the extreme cold snap in February 2021, and due to purchasing additional energy from the market on a net basis primarily due to an extended outage at the Callaway Energy Center. Off-system sales margins decreased primarily as a result of less generation being available for sale due to the extended plant outage and the extreme cold in February partially offset by accidental outage insurance proceeds received beginning in April related to the Callaway outage.¹³

Staff has verified the amounts being refunded to customers during this accumulation period for net insurance recoveries related to the Callaway Outage. A total of \$88.6 million¹⁴ in accidental outage insurance has been claimed related to the recent unplanned outage at Callaway. Ameren Missouri has received approximately \$66.1 million as of July 23, 2021. There is approximately \$46 million included in this FAR filing period covering the period through May 31, 2021. Staff will continue to monitor the remaining proceeds in future FAR filings to ensure all refunds have been returned.

Staff reviewed the proposed 4th Revised Sheet No. 71.15, Mr. Graser's direct testimony, and the work papers in this filing, as well as Ameren Missouri's monthly information submitted in compliance with 20 CSR 4240-20.090(5) for AP37. Staff verified that the actual fuel and purchased power costs and emissions costs, net of off-system sales revenues, match the fuel and purchased power costs and emission costs, net of off-system sales revenues, on line 1 of Ameren Missouri's proposed 4th Revised Sheet No. 71.15 and Mr. Graser's supporting schedules. Staff

¹³ Ameren Missouri, *Direct Testimony of J. Neil Graser*, ER-2022-0026, page 2, line 19 through page 3, line 6.

¹⁴ Staff Data Request No. 0462.3 in Case No. ER-2021-0240.

reviewed Ameren Missouri's monthly reports and verified that the kWh billed, as shown on the monthly reports, matches the accumulation period sales used to calculate the Net Base Energy Cost. Staff reviewed Ameren Missouri's monthly interest rates that are applied to 95% of the over/under Net Base Energy Cost amount and verified that the monthly interest rates and calculations of monthly interest amounts are correct for AP37.

The change in the FAC rate resulting from this application will not cause Ameren Missouri to exceed its allowable cumulative annual growth rate cap percentage of 2.85% that it must comply with under state law due to its adoption of plant-in-service accounting.

Attachment A

Attachment A includes three charts, which provide a summary of Ameren Missouri's thirty-seven (37) FAC rate adjustment filings. Chart 1 illustrates Ameren Missouri's FAR for each of the thirty-seven (37) accumulation periods. Chart 2 illustrates Ameren Missouri's FAC cost summary for Actual Net Base Energy costs and Net Base Energy costs. Chart 3 illustrates Ameren Missouri's FAC cumulative under-recovered amount at the end of each of the thirty-seven (37) accumulation periods.

Staff Recommendation

Ameren Missouri timely filed its proposed 4th Revised Sheet No. 71.15, on July 30, 2021, and based on Staff's review, Staff determined that Ameren Missouri is in compliance with Commission Rule 20 CSR 4240-20.090 (Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms Filing and Submission Requirements) and Ameren Missouri's FAC in its tariff.

Commission Rule 20 CSR 4240-20.090(8)(H) provides, in part:

- (H) Within sixty (60) days after the electric utility files its testimony and tariff sheet(s) to adjust its FARs, the commission shall either—
1. Issue an interim rate adjustment order approving the tariff sheet(s) and the adjustments to the FARs;
 2. Allow the tariff sheet(s) and the adjustments to the FARs to take effect without commission order; or
 3. If it determines the adjustment to the FARs is not in accordance with the provisions of this rule, section 386.266, RSMo, and the FAC mechanism established in the electric utility's most recent general rate proceeding, reject the proposed rate sheets, suspend the timeline of the FAR adjustment filing, set a prehearing date, and order the parties to propose a procedural schedule. The commission may order the electric utility to file tariff sheet(s) to implement interim adjusted FARs to reflect any part of the proposed adjustment that is not in question.

Ameren Missouri requested that 4th Revised Sheet No. 71.15, filed July 30, 2021, as substituted September 8, 2021, become effective on October 1, 2021. Thus, the proposed

tariff sheet was filed with 60 days' notice. Therefore, Staff recommends the Commission issue an order approving the following proposed tariff sheet, as filed on July 30, 2021, as substituted September 8, 2021, to become effective on October 1, 2021, subject to true-up and prudence reviews:

MO.P.S.C. Schedule No. 6

4th Revised Sheet No. 71.15, Cancelling 3rd Revised Sheet No. 71.15.

Staff has verified that Ameren Missouri is not delinquent on any assessment and has filed its 2020 Annual Report. Ameren Missouri is current on its submission of its Surveillance Monitoring reports, required in 20 CSR 4240-20.090(6), and its monthly reports, required by 20 CSR 4240-20.090(5). Staff is not aware of any other matter before the Commission that affects or is affected by this filing, except File No. EO-2022-0027, as noted herein.

Chart 1: Ameren Missouri Fuel Adjustment Rate

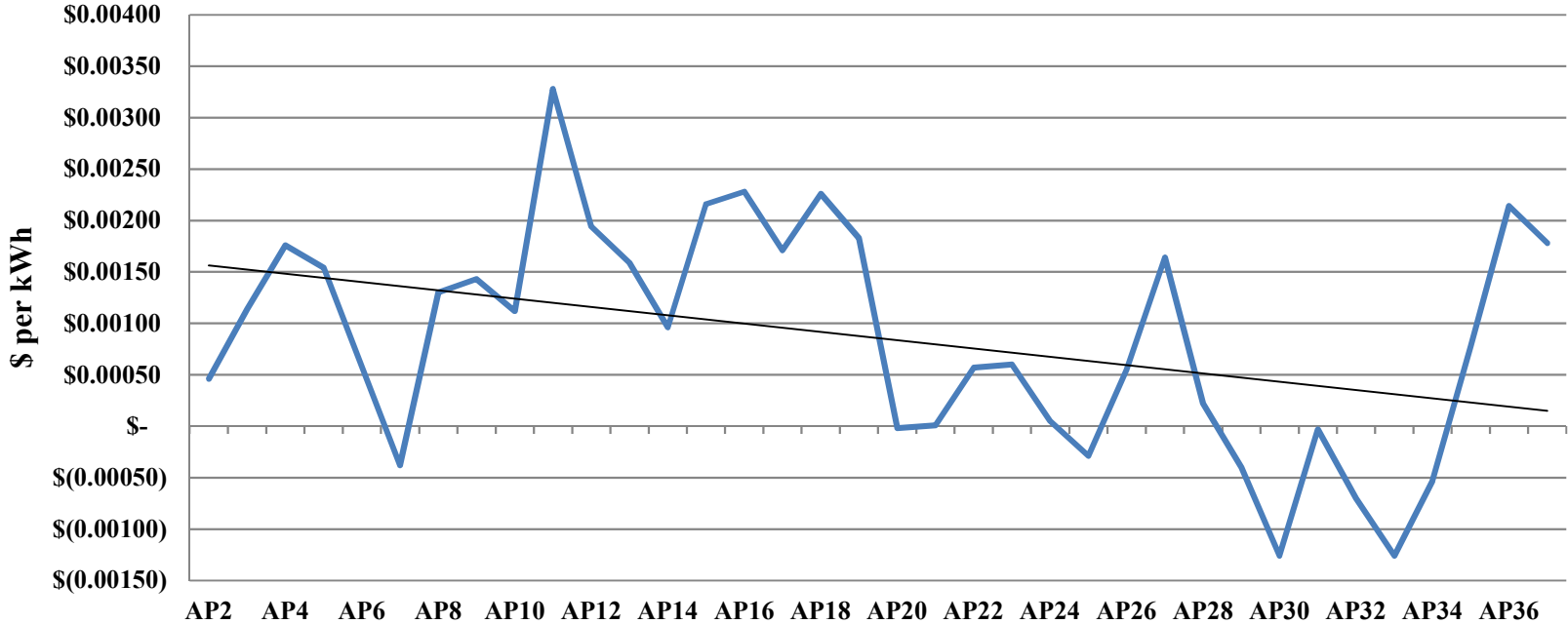


Chart 2: Ameren Missouri FAC Costs Summary

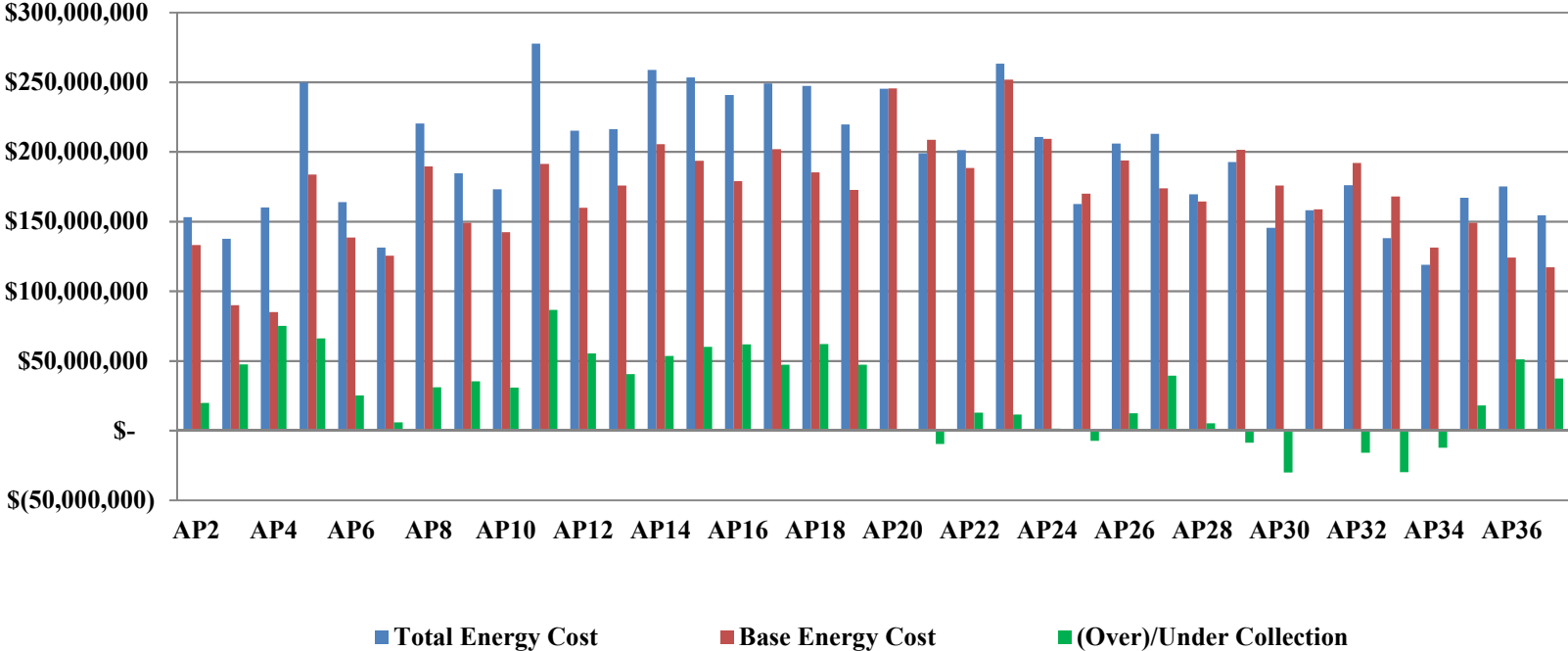
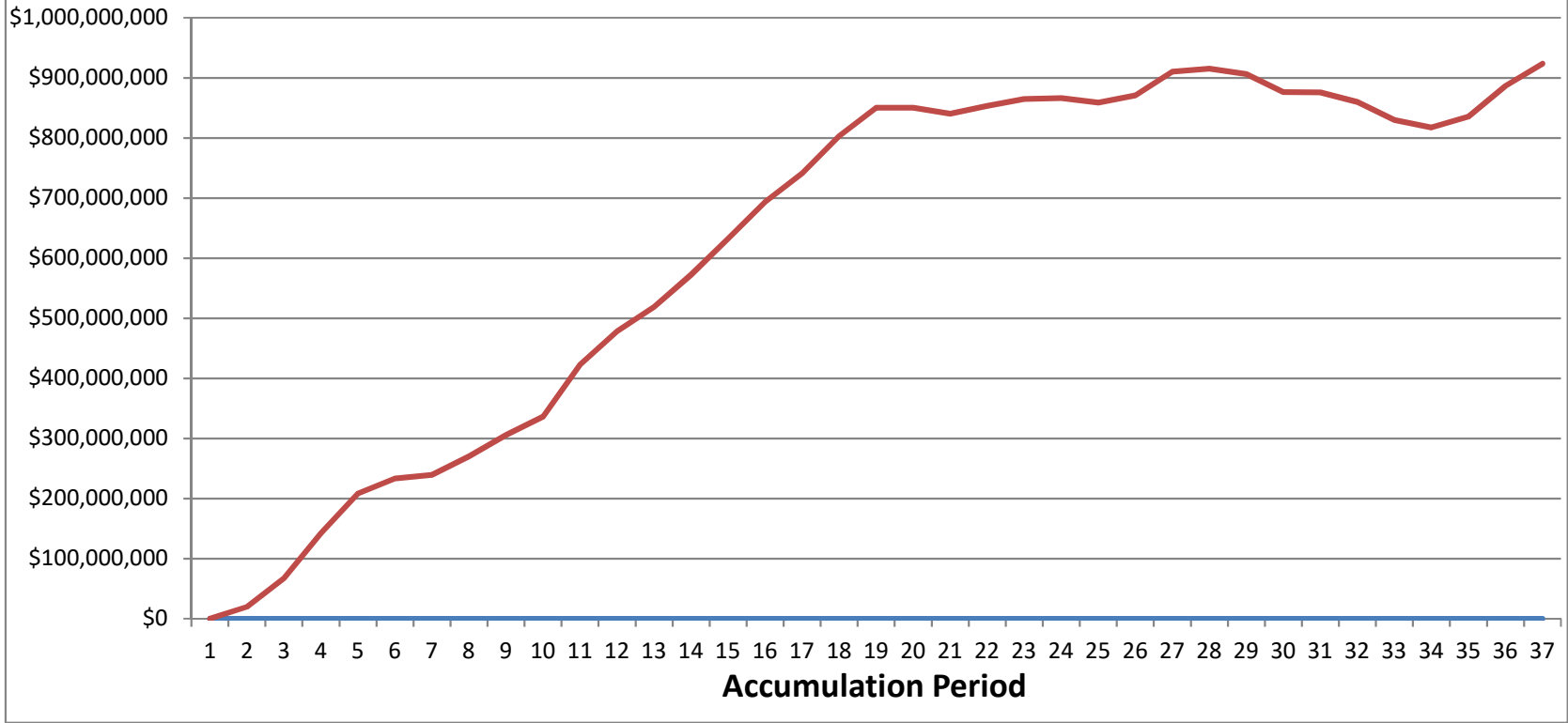


Chart 3: Ameren FAC Cumulative Under-Recovered Amount



BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Adjustment of)
Union Electric Company d/b/a Ameren) Case No. ER-2022-0026
Missouri's Fuel Adjustment Clause for)
the 37th Accumulation Period)

AFFIDAVIT OF AMANDA C. CONNER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

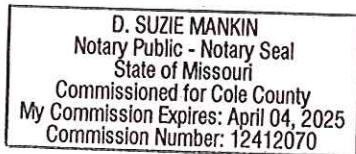
COMES NOW AMANDA C. CONNER and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation in Memorandum* form; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.


AMANDA C. CONNER

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 8th day of September 2021.




Notary Public

