

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Evergy Metro, Inc. d/b/a Evergy)
Missouri Metro's 2023 Annual Reliability Report) File No. EO-2024-_____
Pursuant to 20 CSR 4240-23.010)

In the Matter of Evergy Missouri West, Inc. d/b/a)
Evergy Missouri West's 2023 Annual Reliability) File No. EO-2024-_____
Report Pursuant to 20 CSR 4240-23.010)

NOTICE OF COMPLIANCE FILING

COMES NOW, Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("EMM") and Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("EMW") (collectively, "Evergy" or the "Company") and pursuant to 20 CSR 4240-23.010 submit their respective *2023 Annual Reliability Reports* to the Missouri Public Service Commission ("Commission").

WHEREFORE, the Company submits the attached to the Commission.

Respectfully submitted,

/s/ Roger W. Steiner

Roger W. Steiner MBN#39586
Evergy, Inc.
1200 Main Street, 16th Floor
Kansas City, Missouri 64105
Telephone: (816) 556-2314
E-mail: Roger.Steiner@evergy.com

**ATTORNEY FOR EVERGY MISSOURI
METRO AND EVERGY MISSOURI WEST**

CERTIFICATE OF SERVICE

I hereby certify that a true and copy of the foregoing application was emailed on this 2nd day of May 2024, to the Office of the General Counsel and the Office of the Public Counsel.

/s/ Roger W. Steiner

Roger W. Steiner



**Evergy Missouri West
2023 Reliability Performance Report**

Annual reporting completed pursuant to 20 CSR 4240-23.010

May 2, 2024

Table of Contents

20 CSR 4240.23.010 (1), (3), (4) – Reliability Statistics 2023	2
Table 1: Evergy Missouri West Reliability Indices	2
Table 2: Evergy Missouri West MAIFI (monthly values)	3
Table 3: Evergy Missouri West CEMI (monthly values)	3
20 CSR 4240-23.010 (6), (7) – Highest 5% SAIFI Circuits Assessment.....	3
Table 4: Highest 5% SAIFI Circuit	4 - 5
20 CSR 4240-23.010 (8) - Multi Year Worst Performing Circuit Reporting	5
Table 5: Multi-Year Worst Performing Circuit Report	5 - 6

20 CSR 4240.23.010 (1)(A), (B), (C), (D), and (3) – Reliability Statistics 2023**Table 1: Evergy Missouri West Reliability Indices**

2023	Evergy Missouri West				
Total Customers			343,960		
Adjusted	Month	SAIDI	SAIFI	CAIDI	CAIFI
	1	4.998	0.042	118.966	0.071
	2	4.712	0.052	89.825	0.091
	3	5.338	0.059	89.871	0.1
	4	9.279	0.093	99.570	0.157
	5	7.682	0.078	98.522	0.131
	6	16.594	0.175	94.826	0.294
	7	18.342	0.142	128.731	0.241
	8	13.048	0.132	98.475	0.229
	9	7.425	0.109	68.177	0.183
	10	7.929	0.104	76.019	0.174
	11	9.413	0.109	86.126	0.188
	12	14.342	0.130	109.995	0.222
	Total	119.1	1.228	97.04	2.081
Unadjusted	Month	SAIDI	SAIFI	CAIDI	CAIFI
	1	4.998	0.042	118.966	0.071
	2	4.712	0.052	89.825	0.091
	3	5.338	0.059	89.871	0.1
	4	9.279	0.093	99.570	0.157
	5	7.682	0.078	98.522	0.131
	6	30.453	0.226	134.866	0.379
	7	98.057	0.397	247.055	0.667
	8	13.048	0.132	98.475	0.229
	9	14.978	0.144	104.072	0.242
	10	7.929	0.104	76.019	0.174
	11	9.413	0.109	86.126	0.188
	12	14.342	0.130	109.995	0.222
	Total	220.23	1.568	140.5	2.651

Excludes the following 2023 storm dates from the normalized data:
Jun 30, Jul 5, Jul 14, Jul 15, Jul 30, Jul 31, and Sep 23

Table 2: Evergy Missouri West 2023 MAIFI

Month	Monthly MAIFI
1	0.040
2	0.038
3	0.051
4	0.080
5	0.021
6	0.023
7	0.038
8	0.119
9	0.127
10	0.133
11	0.090
12	0.126

Table 3: Evergy Missouri West 2023 CEMI-6

Month	Monthly CEMI-6
1	0.000000
2	0.000000
3	0.000000
4	0.000294
5	0.002650
6	0.020009
7	0.059213
8	0.184515
9	0.215994
10	0.290099
11	0.480281
12	0.498604

20 CSR 4240-23.010 (6), (7) – Highest 5% SAIFI Circuits Assessment

System hardening patrols and repairs are planned to complete in the 2nd, 3rd, and 4th Quarters of 2024. For circuits where analysis is required, a systematic patrol plan is developed based on identified outage causes. When and where feasible, repairs are made during the initial patrol. Tree patrols will be performed where indicated and spot trimming performed as needed. Other maintenance, modifications, or upgrades not completed during the initial patrol will be completed by the end of the 4th Quarter of 2024. Table 4 lists circuits identified as having the highest 5% of adjusted SAIFI statistics in 2023, as outlined in 20 CSR 4240.23.010 (6).

Table 4: Highest 5% SAIFI Circuits

Service Center	Substation	Circuit	Action Plan	SAIFI	SAIDI
St. Joseph	INDUSTRIAL PARK 161KV #399	399034022	Execute mainline hardening work order.	8.000	533.00
Nevada	NEVADA PLANT #306	306012014	Execute mainline hardening work order.	6.970	346.91
St. Joseph	GOWER #395	395012021	Execute 34KV source c399034022 mainline hardening work order.	5.612	452.04
St. Joseph	KING CITY #402	402012012	Execute 34KV source c40103422 mainline hardening work order.	5.319	667.97
Henrietta	LEXINGTON 69KV #285	285012012	Substation crews made repairs to the substation. No additional action planned.	4.773	505.56
Mound City	OREGON #417	417012021	Execute mainline hardening work order.	4.764	385.42
Warrensburg	POST OAK RURAL #323	323012012	WPC due to poor performing lateral. Execute lateral hardening work order.	4.654	471.18
Sedalia	SEDALIA PLANT #347	347012012	Execute mainline hardening work order.	4.529	196.82
Sedalia	WARSAW 69KV #375	375012011	Execute mainline hardening work order.	4.446	415.22
Warrensburg	CALHOUN #219	219012011	Execute mainline hardening work order.	4.298	311.58
Maryville	MARYVILLE #407	407012082	Execute mainline hardening work order.	4.271	241.48
Trenton	JAMESPORT #267	267012011	Execute mainline hardening work order.	4.261	492.76
St. Joseph	SAVANNAH #427	427012011	Distribution engineering correct controller settings on Recloser RC_R42711 and maintenance the recloser.	4.247	449.96
Nevada	NEVADA PLANT #306	306012011	Substation crews made repairs to the substation. No additional action planned.	4.238	322.89
Liberty	LIBERTY WEST #291	291012012	WPC due to two incidents where public damaged our facilities. Repairs made at the time of the events. No additional action planned.	4.163	279.47
St. Joseph	HWY 48 #397	397012011	Execute 34KV source c40103422 mainline hardening work order.	4.083	289.39
St. Joseph	MESSANIE #409	409012021	WPC due to planned work in the area. The planned work is complete, and the circuit is restored to normal. No additional action planned.	3.990	291.76
Clinton	MONTROSE CITY #303	303012011	Substation Crews have made repairs and installed varmint guarding. No additional action planned.	3.930	360.94
St. Joseph	HWY 48 #397	397012012	Execute 34KV source c40103422 mainline hardening work order.	3.895	268.65

Service Center	Substation	Circuit	Action Plan	SAIFI	SAIDI
Clinton	MONTROSE CITY #303	303012013	Substation has made repairs to the substation. Execute lateral improvement work order on poor performing lateral reclosure.	3.886	517.61
Belton	HARRISONVILLE WEST #254	254012011	Execute mainline hardening work order.	3.871	341.85
St. Joseph	INDUSTRIAL PARK 34KV #400	400012021	Execute mainline hardening work order.	3.822	315.24
Warrensburg	LEETON #284	284012011	Execute 200A mainline hardening work order.	3.813	331.96
Belton	ADRIAN #203	203025011	Execute 25KV mainline hardening work order. Repair and return to service recloser R29911.	3.777	425.85
Warrensburg	POST OAK RURAL #323	323012011	WPC due to 2 poor performing laterals. Execute lateral improvement work order.	3.755	240.86
St. Joseph	EASTOWNE #436	436012031	WPC due to 2 large area outages where the public damaged our facilities. Repairs were made at the time of each incident. No additional action planned.	3.471	243.88

20 CSR 4240-23.010 (8) – Multi-Year Worst Performing Circuit Reporting

The referenced rule requires a plan and schedule to lower SAIFI metrics on circuits that are listed on the highest 5% SAIFI list for two out of three of the preceding years. Table 5 reflects the action plans identified to lower the SAIFI metric for these circuits. Evergy Engineering plans to issue corrective action work orders scheduled for completion during the 3rd and 4th Quarters of 2023. Additional patrols and root cause analysis, where required, are planned to be completed in the 4th Quarter of 2023.

Table 5: Multi-Year Worst Performing Circuit Report

Years	Service Center	Substation	Circuit	Action Plan	SAIFI	SAIDI
2023 2022	St. Joseph	KING CITY #402	402012012	Execute 34KV source c40103422 mainline hardening work order.	5.319	667.97
2023 2022	Mound City	OREGON #417	417012021	Execute mainline hardening work order.	4.764	385.42
2023 2021	Warrensburg	CALHOUN #219	219012011	Execute mainline hardening work order.	4.298	311.58

Years	Service Center	Substation	Circuit	Action Plan	SAIFI	SAIDI
2023 2022	St. Joseph	HWY 48 #397	397012011	Execute 34KV source c40103422 mainline hardening work order.	4.083	289.39
2023 2022 2021	Clinton	MONTROSE CITY #303	303012011	Substation has made repairs to the substation. No additional action planned	3.930	360.94
2023 2022 2021	St. Joseph	HWY 48 #397	397012012	Execute 34KV source c40103422 mainline hardening work order.	3.895	268.65
2023 2021	Clinton	MONTROSE CITY #303	303012013	Substation has made repairs to the substation. Execute lateral improvement work order on poor performing lateral reclosure.	3.886	517.61
2023 2021	Belton	HARRISONVILLE WEST #254	254012011	Execute mainline hardening work order.	3.871	341.85