

Ameren Missouri 20 CSR 4240-23.010 Electric Utility System Reliability Monitoring and Reporting Submission Requirements – <u>Annual Reliability Report</u>

Introduction

This report details Union Electric (dba Ameren Missouri) Company's annual reliability metrics and worst performing circuits for calendar year 2024 as required by Missouri Public Service Commission Rule <u>20 CSR 4240-23.010</u>, Electric Utility System Reliability Monitoring and <u>Reporting Submission Requirements</u> (referred to in the remainder of this document as "the Rule"). This report is required by Sections (2), (7), and (8) of the Rule which state, *"The information required by section (1) shall be filed annually by the last business day of April of the calendar year following the calendar year for which the information was accumulated.... The information developed in accordance with section (6) shall be reported as part of the annual report required by section (2).... If on or after the time the annual report required by section (7) for calendar year 2011 is filled, a circuit has been on the worst performing circuit list for two (2) of the three (3) most recent consecutive calendar years the electrical corporation shall include detailed plans and schedules for improving the performance of that circuit in addition to the other information required by section (7)." This report will provide the reliability measures requested by the Rule, the list of Worst Performing Circuits (WPCs), including Multi-Year Worst Performing Circuits (MWPCs), and the actions taken or planned to improve the performance of these circuits.*

Definitions

For the purposes of this report, the following definitions shall apply:

- 1. <u>System Average Interruption Frequency Index (SAIFI)</u> The average frequency of service interruptions in number of occurrences per customer (total number of customer interruptions divided by the total number of customers served).
- 2. <u>Customer Average Interruption Frequency Index (CAIFI)</u> The average number of interruptions per customer interrupted (total number of customer interruptions divided by the total number of customers affected).
- 3. <u>System Average Interruption Duration Index (SAIDI)</u> The average interruption in minutes per customer served (sum of all customer interruption durations divided by the total number of customers served).
- 4. <u>Customer Average Interruption Duration Index (CAIDI)</u> The average interruption duration (sum of all customer interruption durations divided by the total number of customers interrupted).



- 5. <u>Worst Performing Circuit (WPC)</u> A distribution circuit whose SAIFI value, adjusted to exclude major storm events per IEEE Standard 1366-2012, when compared to the SAIFI values for the other circuits in the Ameren Missouri system places it among the 5% of circuits with the highest SAIFI values in the Ameren Missouri system.
- 6. <u>Multi-Year Worst Performing Circuit (MWPC)</u> A distribution circuit whose SAIFI value has ranked it as a Worst Performing Circuit for any two (2) of the three (3) most recent consecutive calendar years.

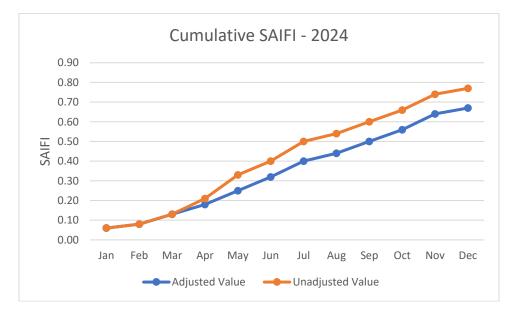


Reliability Metrics

20 CSR 4240-23.010, section 3 states "The information required by section (1) shall be filed both unadjusted and adjusted to exclude major storm events per IEEE Standard 1366-2012, Guide for Electric Power Distribution Reliability Indices." The following tables and graphs show Ameren Missouri's unadjusted and adjusted reliability metrics for calendar year 2024.

SAIFI:

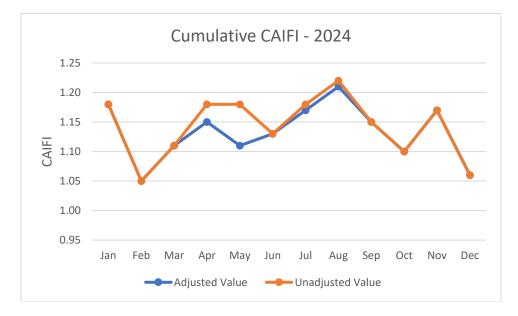
Month	Adjusted Value	Unadjusted Value
Jan	0.06	0.06
Feb	0.08	0.08
Mar	0.13	0.13
Apr	0.18	0.21
May	0.25	0.33
Jun	0.32	0.40
Jul	0.40	0.50
Aug	0.44	0.54
Sep	0.50	0.60
Oct	0.56	0.66
Nov	0.64	0.74
Dec	0.67	0.77





CAIFI:

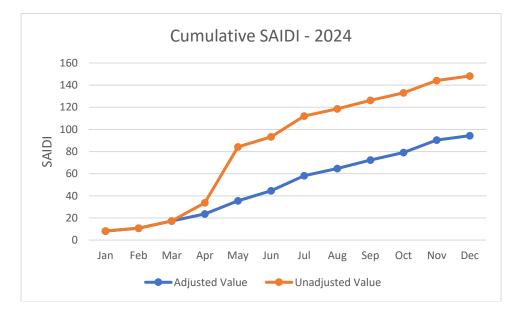
Month	Adjusted Value	Unadjusted Value
Jan	1.18	1.18
Feb	1.05	1.05
Mar	1.11	1.11
Apr	1.15	1.18
May	1.11	1.18
Jun	1.13	1.13
Jul	1.17	1.18
Aug	1.21	1.22
Sep	1.15	1.15
Oct	1.10	1.10
Nov	1.17	1.17
Dec	1.06	1.06





SAIDI:

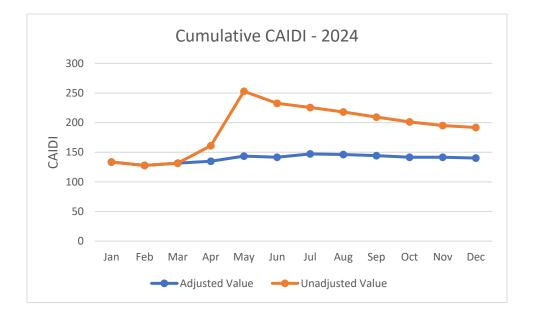
Month	Adjusted Value	Unadjusted Value
Jan	8	8
Feb	11	11
Mar	17	17
Apr	24	34
May	35	84
Jun	45	93
Jul	58	112
Aug	65	119
Sep	72	126
Oct	79	133
Nov	90	144
Dec	94	148





CAIDI:

Month	Adjusted Value	Unadjusted Value
Jan	133	133
Feb	128	128
Mar	132	132
Apr	135	161
May	144	253
Jun	142	233
Jul	147	226
Aug	146	218
Sep	144	210
Oct	142	201
Nov	142	195
Dec	140	192





Ameren Missouri 2024 Worst Performing Circuits

Ameren Missouri has performed SAIFI calculations on all its distribution circuits in accordance with section (6) of the Rule. The circuits have been ranked in order of descending SAIFI and the 5 percent of the circuits with the highest SAIFI values have been designated as Worst Performing Circuits (WPCs). Multi-Year Worst Performing Circuits (MWPCs) have also been identified. The 2024 WPCs, including those designated as MWPCs are listed in Appendix A.

Ameren Missouri has analyzed each of the WPCs for the reasons the circuit qualifies as a WPC and the actions planned or taken to improve the WPC's performance have been included in Appendix B. Each of the MWPCs in Appendix B is identified with the title "Single-Year or Multi-Year WPC Analysis and Remedial Action Report". The MWPC reports contain detailed information regarding work completed or planned to improve the performance of each of the MWPCs as required by the Rule.

Multi-Year Worst Performing Circuits not on the 2024 WPC list

The MWPCs circuits not identified as WPCs in 2024 but which were WPCs in 2022 and 2023 are listed in Appendix C. Appendix D details the actions taken and/or planned to improve the performance of these circuits.

Conclusion

This report satisfies the reporting requirements of 20 CSR 4240-23.010 for the calendar year 2024. The reported reliability metrics demonstrate continued improvement in the reliability of Ameren Missouri's electric distribution system. With an adjusted SAIFI value of 0.67 Ameren Missouri's customers experience, on average, less than one extended outage per year. The reported analyses and corrective actions for the Worst Performing Circuits also demonstrate Ameren Missouri's high level of focus on improving reliability and our full commitment to satisfying both the intent and the requirements of this rule.



APPENDIX A

		11										Years
Division	Operating Area	Circuit	Volt	Cust	CI	СМІ	SAIDI	SAIFI	2022	2023	2024	WPC
MERAMEC VALLEY	JEFFERSON	560057	12KV	859	5866	570337	664	6.83			WPC	1
GATEWAY	BERKELEY	131004	4KV	364	2235	186383	512	6.14			WPC	1
CENTRAL MO	MOBERLY	939051	12KV	229	1101	154452	674	4.81		WPC	WPC	2
NORTHEAST MO	KIRKSVILLE	940051	12KV	258	1089	403664	1565	4.22			WPC	1
MERAMEC VALLEY	JEFFERSON	516055	12KV	857	3455	291729	340	4.03			WPC	1
NORTHEAST MO	KIRKSVILLE	753053	4KV	85	335	54398	640	3.94			WPC	1
ARCHVIEW	MACKENZIE	276053	12KV	1223	4604	591666	484	3.77			WPC	1
MERAMEC VALLEY	ELLISVILLE	295056	12KV	607	1913	197766	326	3.15		WPC	WPC	2
CENTRAL MO	JEFFERSON CITY	880053	12KV	129	399	49931	387	3.09			WPC	1
SEMO	DEXTER	685053	12KV	491	1510	188615	384	3.08		WPC	WPC	2
NORTHEAST MO	KIRKSVILLE	781001	4KV	205	629	45859	224	3.07		WPC	WPC	2
CENTRAL MO	JEFFERSON CITY	845052	12KV	140	428	114394	817	3.06			WPC	1
GATEWAY	ST CHARLES	383051	12KV	594	1738	151742	255	2.93			WPC	1
NORTHEAST MO	KIRKSVILLE	855052	13.8KV	291	850	51683	178	2.92			WPC	1
MERAMEC VALLEY	ELLISVILLE	289054	12KV	988	2792	514961	521	2.83			WPC	1
ARCHVIEW	MACKENZIE	020004	4KV	273	737	78210	286	2.70			WPC	1
GATEWAY	BERKELEY	134051	12KV	1519	4096	611470	403	2.70			WPC	1
CENTRAL MO	EXCELSIOR SPRINGS	760051	13.8KV	417	1111	97705	234	2.66			WPC	1
CENTRAL MO	JEFFERSON CITY	392052	12KV	1009	2659	221680	220	2.64			WPC	1
ARCHVIEW	MACKENZIE	276052	12KV	1387	3627	406237	293	2.62			WPC	1
GATEWAY	BERKELEY	210056	12KV	287	713	85624	298	2.48		WPC	WPC	2
CENTRAL MO	MEXICO	704002	4KV	443	1098	102683	232	2.48			WPC	1
MERAMEC VALLEY	ELLISVILLE	165056	12KV	439	1077	282887	644	2.45			WPC	1
GATEWAY	DORSETT	123054	12KV	1179	2880	172949	147	2.44	WPC		WPC	2
SEMO	CAPE GIRARDEAU	633057	12KV	1198	2905	162288	135	2.43	WPC		WPC	2
ARCHVIEW	MACKENZIE	257003	4KV	753	1813	134385	178	2.41			WPC	1
NORTHEAST MO	WENTZVILLE	909053	12KV	1086	2617	186229	171	2.41			WPC	1
GATEWAY	BERKELEY	096002	4KV	738	1762	162708	220	2.39	WPC		WPC	2
SEMO	POTOSI	487051	12KV	77	180	15801	205	2.34			WPC	1
ARCHVIEW	GERALDINE	208001	4KV	711	1647	324208	456	2.32		WPC	WPC	2
GATEWAY	DORSETT	178054	12KV	1408	3247	420566	299	2.31			WPC	1
NORTHEAST MO	KIRKSVILLE	855053	13.8KV	337	766	121693	361	2.27			WPC	1
MERAMEC VALLEY	JEFFERSON	517051	12KV	850	1933	239652	282	2.27			WPC	1
GATEWAY	DORSETT	209052	12KV	239	539	36768	154	2.26			WPC	1
ARCHVIEW	GERALDINE	293003	4KV	70	156	10890	156	2.23			WPC	1
GATEWAY	DORSETT	258052	12KV	613	1341	177982	290	2.19			WPC	1
GATEWAY	DORSETT	235055	12KV	1028	2209	614694	598	2.15		WPC	WPC	2
CENTRAL MO	MEXICO	987051	12KV	610	1304	196226	322	2.14			WPC	1
NORTHEAST MO	WENTZVILLE	642056	12KV	1552	3316	107545	69	2.14			WPC	1



Division	Operating Area	Circuit	Volt	Cust	CI	CMI	SAIDI	SAIFI	2022	2023	2024	Years WPC
ARCHVIEW	MACKENZIE	276051	12KV	901	1923	165734	184	2.13			WPC	1
ARCHVIEW	GERALDINE	104006	4KV	293	622	64541	220	2.12			WPC	1
CENTRAL MO	MOBERLY	739051	12KV	364	763	177461	488	2.10			WPC	1
ARCHVIEW	MACKENZIE	157001	4KV	529	1103	158158	299	2.09			WPC	1
CENTRAL MO	MOBERLY	722052	12KV	63	130	89553	1421	2.06			WPC	1
MERAMEC VALLEY	FRANKLIN	506056	12KV	1046	2118	168039	161	2.03			WPC	1
CENTRAL MO	EXCELSIOR SPRINGS	772052	13.8KV	480	969	85407	178	2.02			WPC	1
GATEWAY	BERKELEY	201008	4KV	132	265	106680	808	2.01			WPC	1
SEMO H	HAYTI	465053	12KV	636	1278	127270	200	2.01			WPC	1
CENTRAL MO	LAKESIDE	581052	12KV	2	4	275	138	2.00			WPC	1
ARCHVIEW	MACKENZIE	183010	4KV	964	1930	432584	449	2.00			WPC	1
ARCHVIEW	MACKENZIE	101007	4KV	811	1618	176978	218	2.00			WPC	1
CENTRAL MO	MEXICO	AP1002	2.4KV DELTA	1	2	612	612	2.00			WPC	1
	DEXTER	699051	12KV	690	1372	73803	107	1.99			WPC	1
GATEWAY [DORSETT	267060	12KV	328	651	88169	269	1.99			WPC	1
SEMO [DEXTER	879006	4KV	254	500	126887	500	1.97			WPC	1
GATEWAY	BERKELEY	156009	4KV	507	998	186559	368	1.97		WPC	WPC	2
CENTRAL MO E	BOONVILLE	949055	12KV	506	998	125640	248	1.97			WPC	1
NORTHEAST MO	WENTZVILLE	652055	12KV	1239	2445	427632	345	1.97			WPC	1
NORTHEAST MO	WENTZVILLE	637054	12KV	525	1033	101609	194	1.97			WPC	1
GATEWAY	BERKELEY	229052	12KV	1173	2296	248918	212	1.96			WPC	1
NORTHEAST MO	BROOKFIELD	860053	12KV	242	473	46161	191	1.96		WPC	WPC	2
MERAMEC VALLEY	ELLISVILLE	169053	12KV	243	477	112565	463	1.96		WPC	WPC	2
CENTRAL MO	JEFFERSON CITY	719052	12KV	413	807	237567	575	1.95	WPC		WPC	2
ARCHVIEW	MACKENZIE	020013	4KV	32	62	6616	207	1.94			WPC	1
MERAMEC VALLEY	ELLISVILLE	279053	12KV	511	959	87483	171	1.88			WPC	1
SEMO F	POTOSI	483051	12KV	767	1435	117989	154	1.87			WPC	1
NORTHEAST MO	KIRKSVILLE	965053	13.8KV	611	1142	206805	338	1.87			WPC	1
SEMO H	HAYTI	466055	12KV	142	264	29403	207	1.86			WPC	1
MERAMEC VALLEY	JEFFERSON	546051	12KV	600	1112	424989	708	1.85			WPC	1
NORTHEAST MO	KIRKSVILLE	813051	13.8KV	609	1119	27768	46	1.84			WPC	1
ARCHVIEW	GERALDINE	044006	4KV	158	289	41258	261	1.83			WPC	1
NORTHEAST MO	KIRKSVILLE	965051	13.8KV	703	1283	66317	94	1.83			WPC	1
SEMO (CAPE GIRARDEAU	646052	12KV	954	1745	157455	165	1.83			WPC	1
MERAMEC VALLEY F	FRANKLIN	507052	12KV	212	384	43353	204	1.81			WPC	1
MERAMEC VALLEY F	FRANKLIN	555053	12KV	994	1794	135948	137	1.81			WPC	1
ARCHVIEW	MACKENZIE	136051	12KV	1757	3177	406827	232	1.81			WPC	1
SEMO F	POTOSI	451054	13.2KV	385	694	256694	667	1.80	WPC		WPC	2
CENTRAL MO	JEFFERSON CITY	957053	12KV	801	1435	109666	137	1.79			WPC	1
SEMO F	POTOSI	475053	12KV	249	443	56469	227	1.78			WPC	1



Division	Operating Area	Circuit	Volt	Cust	CI	CMI	SAIDI	SAIFI	2022	2023	2024	Years WPC
MERAMEC VALLEY	ELLISVILLE	282056	12KV	642	1133	130546	203	1.77		WPC	WPC	2
NORTHEAST MO	KIRKSVILLE	851051	13.8KV	143	251	130568	913	1.76			WPC	1
GATEWAY	BERKELEY	167056	12KV	742	1298	164758	222	1.75			WPC	1
GATEWAY	BERKELEY	215054	12KV	1213	2083	152524	126	1.72			WPC	1
SEMO	CAPE GIRARDEAU	607051	12KV	471	805	66463	141	1.71			WPC	1
NORTHEAST MO	LOUISIANA	629052	12KV	70	119	34081	487	1.70	WPC		WPC	2
ARCHVIEW	MACKENZIE	146002	4KV	398	677	141651	356	1.70			WPC	1
ARCHVIEW	MACKENZIE	196005	4KV	476	811	102657	216	1.70			WPC	1
SEMO	POTOSI	485051	12KV	456	766	192287	422	1.68			WPC	1
GATEWAY	BERKELEY	084001	4KV	164	275	53045	323	1.68			WPC	1
GATEWAY	BERKELEY	393055	12KV	712	1193	228856	321	1.68			WPC	1
MERAMEC VALLEY	JEFFERSON	576052	12KV	1157	1937	544669	471	1.67			WPC	1
MERAMEC VALLEY	FRANKLIN	132051	12KV	712	1174	130943	184	1.65			WPC	1
NORTHEAST MO	LOUISIANA	900051	34.5KV	45	74	25276	562	1.64			WPC	1
NORTHEAST MO	KIRKSVILLE	863051	12KV	489	800	107405	220	1.64			WPC	1
ARCHVIEW	MACKENZIE	146004	4KV	844	1382	221859	263	1.64			WPC	1
CENTRAL MO	BOONVILLE	653001	4KV	53	87	7980	151	1.64			WPC	1
SEMO	DEXTER	656055	12KV	1131	1824	131256	116	1.61			WPC	1
MERAMEC VALLEY	FRANKLIN	127053	12KV	1040	1658	235316	226	1.59			WPC	1
CENTRAL MO	JEFFERSON CITY	856057	12KV	502	789	112079	223	1.57			WPC	1
ARCHVIEW	MACKENZIE	015011	4KV	368	579	40523	110	1.57			WPC	1
MERAMEC VALLEY	JEFFERSON	546052	12KV	590	921	73218	124	1.56			WPC	1
CENTRAL MO	LAKESIDE	216051	12KV	218	339	76758	352	1.56			WPC	1
ARCHVIEW	MACKENZIE	228053	12KV	169	263	129523	766	1.56	WPC	WPC	WPC	3
GATEWAY	DORSETT	145053	12KV	544	847	108955	200	1.56			WPC	1
MERAMEC VALLEY	JEFFERSON	546056	12KV	1030	1592	129813	126	1.55			WPC	1
GATEWAY	BERKELEY	214053	12KV	807	1247	111309	138	1.55			WPC	1
GATEWAY	DORSETT	264053	12KV	1224	1879	334383	273	1.54			WPC	1
CENTRAL MO	ELDON	676053	12KV	498	766	123605	248	1.54			WPC	1
NORTHEAST MO	WENTZVILLE	636054	12KV	1428	2195	111285	78	1.54		WPC	WPC	2
SEMO	ST FRANCOIS	571051	12KV	351	536	32135	92	1.53		WPC	WPC	2
MERAMEC VALLEY	JEFFERSON	516051	12KV	178	270	40816	229	1.52			WPC	1
MERAMEC VALLEY	JEFFERSON	576051	12KV	508	770	88555	174	1.52			WPC	1
NORTHEAST MO	KIRKSVILLE	721052	12KV	148	225	17496	118	1.52			WPC	1
ARCHVIEW	MACKENZIE	116002	4KV	893	1356	241582	271	1.52			WPC	1
ARCHVIEW	MACKENZIE	053054	12KV	385	576	126455	328	1.50			WPC	1
GATEWAY	DORSETT	283055	12KV	345	516	208058	603	1.50			WPC	1
GATEWAY	DORSETT	139003	4KV	351	526	73889	211	1.50			WPC	1
MERAMEC VALLEY	JEFFERSON	189052	12KV	837	1248	359079	429	1.49			WPC	1
MERAMEC VALLEY	FRANKLIN	510052	12KV	697	1034	273978	393	1.48			WPC	1



APPENDIX B Single Year WPC Analysis and Remedial Action Report

Circuit Number:	015011
Division:	ARCHVIEW
ZIP Codes(s) Served:	63116, 63104
Customers Served:	368
Customer Interruptions (CI):	579
SAIFI Value:	1.57
SAIDI Value:	110

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	56	9.67%	4
TREE	352	60.79%	2
OVERLOAD	1	0.17%	1
OTHER	25	4.32%	1
UNKNOWN	145	25.04%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents accounted for 92% of the customer interruptions in 2024. One issue was due to a tree breaking and falling on primary. Repairs were completed on OAS #242715067. The second incident was due to A and C fuses blowing in on a tap. The tap was inspected at the time and no issue was found. The third incident was due to a B phase fuse blowing on the same tap. The tap was inspected at the time and no issue was found. Engineering reinspected this tap on a separate occasion and no issue was found. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	020004
Division:	ARCHVIEW
ZIP Codes(s) Served:	63104, 63119
Customers Served:	273
Customer Interruptions (CI):	737
SAIFI Value:	2.70
SAIDI Value:	286

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
PUBLIC	228	30.94%	2
EQUIPMENT/UG	255	34.60%	1
OTHER	254	34.46%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents accounted for 99% of the customer interruptions in 2024. One issue was due to an underground cable fault. Repairs were completed on work request KB43300. On the second incident occurred when the circuit tripped open, but, after inspecting the circuit, no issue was found. The third incident was due to a public vehicle hitting a pole. Repairs were completed on work request KB50427. An underground visual inspection was completed in 2023. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026. There are no reoccurring problems identified on the circuit and no further work is required at this time.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	020013
Division:	ARCHVIEW
ZIP Codes(s) Served:	63104, 63102
Customers Served:	32
Customer Interruptions (CI):	62
SAIFI Value:	1.94
SAIDI Value:	207

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/UG	61	98.39%	2
OTHER	1	1.61%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents accounted for 98% of the customer interruptions in 2024. One issue was due to an underground cable failure. Repairs were completed on work request KA94417. The second issue was due to an underground cable failure in a different location, which was repaired on KB40926. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2023. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	044006
Division:	ARCHVIEW
ZIP Codes(s) Served:	63124
Customers Served:	158
Customer Interruptions (CI):	289
SAIFI Value:	1.83
SAIDI Value:	261

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	51	17.65%	2
PUBLIC	51	17.65%	1
EQUIPMENT/UG	155	53.63%	1
TREE	31	10.73%	3
OTHER	1	0.35%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents accounted for 87% of customer interruptions in 2024. A section of circuit exit cable failed on 10/24/2024. The cable was repaired on work order KB47641. This outage caused 54% of customer interruptions. A public vehicle hit the pole, and it led to the outage on 03/29/2024. The switch D8768 was reset on OAS #241201813. This outage caused 18% of customer interruptions. Another interruption happened when a crew was repairing the 3phase vertical 600A switch on SAWS request 51306. There are no recurring problems identified on the circuit and no further work is required at this time. Overhead and underground visual inspections are planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was competed in 2023, and the next full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	053054
Division:	ARCHVIEW
ZIP Codes(s) Served:	63126, 63128, 63127
Customers Served:	385
Customer Interruptions (CI):	576
SAIFI Value:	1.50
SAIDI Value:	328

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	397	68.92%	8
LIGHTNING	8	1.39%	2
TREE	161	27.95%	10
ANIMAL	10	1.74%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

A primary fault led to a device outage on 10/10/2024. Repairs were made on KB44610. This outage caused 50% of the circuit's customer interruptions. Another incident occurred when one span of 1/0AA took out the A and C phases at 63 Lincord PPR and led to a device outage on 5/17/24. Repairs were made on KB15134. This outage caused 10% of the circuit's customer interruptions. Several device, fused tap and transformer, outages caused the remaining 40% customer interruptions. There are no recurring problems identified on the circuit and no further work is required at this time. The last overhead visual inspection was completed in 2023, and the next visual overhead inspection is planned for 2027. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023, and a full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	084001
Division:	GATEWAY
ZIP Codes(s) Served:	63135, 63136, 63133
Customers Served:	164
Customer Interruptions (CI):	275
SAIFI Value:	1.68
SAIDI Value:	323

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	112	40.73%	1
TREE	163	59.27%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 41% of customer interruptions occurred as a result of an overhead equipment malfunction on 7/7/2024. Repairs were made on OAS #241890579, and an FCI was installed. Another 59% of customer interruptions in 2024 occurred on 7/8/24 and 7/10/24 due to tree contact. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	101007
Division:	ARCHVIEW
ZIP Codes(s) Served:	63109
Customers Served:	811
Customer Interruptions (CI):	1,618
SAIFI Value:	2.00
SAIDI Value:	218

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/UG	1,616	99.88%	3
EMPLOYEES	2	0.12%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

A section of DIP-Jamieson-2 failed on 3/25/2024 and took out the circuit. The cable was isolated and repaired on OAS #240851674. This outage caused 50% of the circuit's customer interruptions. Another circuit outage occurred on 4/2/2024, when a section of the circuit exit cable failed. The cable was isolated and repaired on KB05233. This outage caused 50% of the circuit's customer interruptions. Two single outages caused the remaining <1% of the circuit's customer interruptions. There are no recurring problems identified on the circuit and no further work is required at this time. The last overhead visual inspection was completed in 2021, and the next overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025, and a full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	104006
Division:	ARCHVIEW
ZIP Codes(s) Served:	63121, 63136
Customers Served:	293
Customer Interruptions (CI):	622
SAIFI Value:	2.12
SAIDI Value:	220

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	299	48.07%	4
EQUIPMENT/UG	265	42.60%	1
TREE	33	5.31%	3
OTHER	6	0.96%	1
UNKNOWN	19	3.05%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two unrelated incidents caused 88% of the customer interruptions on this circuit in 2024. The first incident was due to warped overhead primary at fuse U15561 and backbone. Primary was repaired with standard wire, and the rest of circuit was patrolled and no further damage was found. The second incident occurred when underground circuit exit cable faulted, and it was replaced with the same size to restore to all customers. An overhead visual inspection was completed in 2024. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	116002
Division:	ARCHVIEW
ZIP Codes(s) Served:	63104, 63118
Customers Served:	893
Customer Interruptions (CI):	1,356
SAIFI Value:	1.52
SAIDI Value:	271

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,014	74.78%	6
TREE	340	25.07%	7
OTHER	2	0.15%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents accounted for 91% of the customer interruptions in 2024. One incident was due to a switch breaking. Repairs were made on work request KB03281. The second incident was due to a tree that broke and damaged an transformer. Repairs were made on work request KB56403. The third incident was due to a jumper burning up and was repaired on work request KB06919. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2023. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	127053
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63090
Customers Served:	1,040
Customer Interruptions (CI):	1,658
SAIFI Value:	1.59
SAIDI Value:	226

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	67	4.04%	10
LIGHTNING	3	0.18%	2
EQUIPMENT/UG	31	1.87%	2
TREE	1,134	68.40%	8
EMPLOYEES	1	0.06%	1
ANIMAL	5	0.30%	2
OTHER	415	25.03%	2
UNKNOWN	2	0.12%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Over 82% of the total customer interruptions occured during a storm on 4/1/24. These incidents were fixed on OAS #240923695, #240923225, #240923818, and #240923857, respectively. Since a full-cycle tree trim was completed in 2024, there are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2023. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	131004
Division:	GATEWAY
ZIP Codes(s) Served:	63135, 63136
Customers Served:	364
Customer Interruptions (CI):	2,235
SAIFI Value:	6.14
SAIDI Value:	512

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	738	33.02%	11
PUBLIC	1,051	47.02%	3
TREE	98	4.38%	7
UNKNOWN	348	15.57%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 47% of customer interruptions occurred as a result of public vehicles hitting poles on 1/6/24, 4/1/24, and 8/23/24. Repairs were made on OAS #240060302, #240921280, and #242360143 respectively. Another 31% of customer interruptions were due to LA damage on 240642399 and primary phase touching due to high winds. Repairs were made on OAS #240630545. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is planned for 2025. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	132051
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63055, 63089, 63039
Customers Served:	712
Customer Interruptions (CI):	1,174
SAIFI Value:	1.65
SAIDI Value:	184

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	102	8.69%	11
LIGHTNING	16	1.36%	6
PUBLIC	611	52.04%	4
EQUIPMENT/UG	50	4.26%	6
TREE	388	33.05%	17
ANIMAL	3	0.26%	3
OTHER	2	0.17%	2
UNKNOWN	2	0.17%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Over 49% of customer interruptions are attributed to a public vehicle accident involving Ameren facilities (claim# 4110X). Repairs were made on OAS #243201385. Likewise, 23% of customer interruptions are attributed to repeat vegetation outages at device 2307919302. There is a mid-cycle patrol planned for 2025, but we will advise our vegetation group to patrol downstream of device 2307919302 and clear any areas of concern. No further work is required at this time. An underground detail inspection is planned for 2025. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	134051
Division:	GATEWAY
ZIP Codes(s) Served:	63031, 63042
Customers Served:	1,519
Customer Interruptions (CI):	4,096
SAIFI Value:	2.70
SAIDI Value:	403

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,938	47.31%	11
LIGHTNING	51	1.25%	1
TREE	1,727	42.16%	12
EMPLOYEES	1	0.02%	1
ANIMAL	175	4.27%	11
UNKNOWN	204	4.98%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 37% of customer interruptions occurred as a result of a crossarm breaking. Repairs were made on OAS #243092949. Another 37% of customer interruptions were due to tree contact with primary. Repairs were made on OAS #242720066. There are no reoccurring problems identified on the circuit and no further work is required at this time. An overhead visual inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	136051
Division:	ARCHVIEW
ZIP Codes(s) Served:	63129
Customers Served:	1,757
Customer Interruptions (CI):	3,177
SAIFI Value:	1.81
SAIDI Value:	232

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,144	36.01%	3
EQUIPMENT/UG	207	6.52%	8
TREE	1,785	56.19%	5
EMPLOYEES	1	0.03%	1
ANIMAL	2	0.06%	1
OTHER	38	1.20%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents accounted for 91% of customer interruptions in 2024. One issue was due to a tree breaking causing a pole to break. Repairs were made on work request KB00717. The second incident was due to a lightning arrestor burning up during a rainstorm and was repaired on work request KB14418. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025. A mid-cycle tree patrol is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	139003
Division:	GATEWAY
ZIP Codes(s) Served:	63124, 63144
Customers Served:	351
Customer Interruptions (CI):	526
SAIFI Value:	1.50
SAIDI Value:	211

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	5	0.95%	3
TREE	514	97.72%	11
ANIMAL	6	1.14%	1
UNKNOWN	1	0.19%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents accounted for 87% of the customer interruptions in 2024. A circuit outage caused 64% of the circuit's customer interruptions due to a tree falling on primary wires during a storm. Repairs were made on OAS #241033022. Two back-to-back outages on device D20053 accounted for 23% of the circuit's customer interruptions due to down primary on two separate spans caused by broken trees. Repairs were made on KA95082. Several device and other fused tap and transformer outages caused the remaining 13% of the circuit's customer interruptions. Distribution automation trip savers are being added on work orders KA41390 and KA41389. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2024. A groundline inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	145053
Division:	GATEWAY
ZIP Codes(s) Served:	63141, 63017, 63025, 63129, 63131
Customers Served:	544
Customer Interruptions (CI):	847
SAIFI Value:	1.56
SAIDI Value:	200

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	60	7.08%	4
EQUIPMENT/UG	7	0.83%	4
TREE	748	88.31%	6
ANIMAL	32	3.78%	7

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, three tree-related incidents resulted in 86% of the customer interruptions. On June 28th, most of the customers on this circuit lost power due to a fallen tree. This incident accounted for 40% of customer interruptions. Repairs were made on work order KB24469. The other two tree-related incidents were due to a tree falling onto primary wires. Repairs were made at the time of the outage on OAS #240123766 for the incident that happened on 1/12/2024, and the incident on 3/8/2024 didn't require any repairs. There are no recurring problems on this circuit and no other work is required currently. A visual overhead inspection was completed in 2024. Any repair work identified as a result of thes inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle patrol is planned for 2025, and a full-cycle tree trim is planned for 2028.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	146002
Division:	ARCHVIEW
ZIP Codes(s) Served:	63118
Customers Served:	398
Customer Interruptions (CI):	677
SAIFI Value:	1.70
SAIDI Value:	356

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	105	15.51%	10
TREE	572	84.49%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

One outage accounted for 84% of customer interruptions in 2024. This outage was due to a tree breaking causing two poles to break. Repairs were made on OAS #241903634 and #241910184. There are no reoccurring problems identified on the circuit and no further work is required at this time. An overhead visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025, and a full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	146004
Division:	ARCHVIEW
ZIP Codes(s) Served:	63118, 63028
Customers Served:	844
Customer Interruptions (CI):	1,382
SAIFI Value:	1.64
SAIDI Value:	263

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,342	97.11%	11
TREE	16	1.16%	3
OTHER	24	1.74%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two outages accounted for 90% of the customer interruptions in 2024. Both outages were due to primary coming down during rainstorms. One was repaired on work request KB56835 and the other on work request KB33944. A tripsaver fuse is planned to be added in 2025 on work request KA41828 in the area where these issues occurred. An underground visual inspection was completed in 2024. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	157001
Division:	ARCHVIEW
ZIP Codes(s) Served:	63116
Customers Served:	529
Customer Interruptions (CI):	1,103
SAIFI Value:	2.09
SAIDI Value:	299

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	572	51.86%	8
PUBLIC	526	47.69%	3
TREE	1	0.09%	1
EMPLOYEES	1	0.09%	1
OVERLOAD	1	0.09%	1
OTHER	2	0.18%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents account for 92% of the customer interruptions in 2024. One issue was due to a public vehicle hitting a pole. Repairs were made on work request KB92669. The second incident was due to a broken pole. Repairs were made on work request KB55829. There are no reoccurring problems identified on the circuit and no further work is required at this time. A groundline inspection was completed in 2022. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	165056
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63069, 63025, 63001
Customers Served:	439
Customer Interruptions (CI):	1,077
SAIFI Value:	2.45
SAIDI Value:	644

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	243	22.56%	19
LIGHTNING	36	3.34%	3
PUBLIC	111	10.31%	2
EQUIPMENT/UG	1	0.09%	1
TREE	572	53.11%	23
EMPLOYEES	23	2.14%	1
ANIMAL	64	5.94%	5
OTHER	2	0.19%	1
UNKNOWN	25	2.32%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There were three device outages that accounted for 40% of the customer interruptions in 2024. One large device outage was due to a tree that broke and made contact with the overhead lines located along Fox Creek Road near Highway 44. The other two large device outages were due to a public vehicle that hit and broke a pole located along Hunters Ford Road and an overhead jumper that burned open located along Hunters Ford Road. The pole was replaced under work order KB53032, and the overhead jumper was repaired under work order KB53031. The remaining device outages were largely due to tree contacts and overhead equipment malfunctions. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	167056
Division:	GATEWAY
ZIP Codes(s) Served:	63137, 63138, 63136
Customers Served:	742
Customer Interruptions (CI):	1,298
SAIFI Value:	1.75
SAIDI Value:	222

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	48	3.70%	6
LIGHTNING	36	2.77%	1
EQUIPMENT/UG	582	44.84%	1
TREE	618	47.61%	6
ANIMAL	12	0.92%	2
OTHER	2	0.15%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 45% of customer interruptions were due to a SWGR being flooded. Repairs to the gear were made on OAS #243101416. Another 45% of customer interruptions were due to tree contact during a storm. Repairs to the primary were made on OAS #241860105. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2023. An overhead visual inspection was completed in 2023. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025. A mid-cycle tree patrol is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	178054
Division:	GATEWAY
ZIP Codes(s) Served:	63021, 63011
Customers Served:	1,408
Customer Interruptions (CI):	3,247
SAIFI Value:	2.31
SAIDI Value:	299

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,422	43.79%	2
PUBLIC	6	0.18%	2
EQUIPMENT/UG	220	6.78%	13
TREE	1,501	46.23%	4
ANIMAL	98	3.02%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two circuit outages accounted for 86% of the customer interruptions in 2024. A circuit outage on 2/21/2024 caused 43% of the circuit's customer interruptions due to neutral wire wrapping over one of the primary phases over highway 141. Repairs were made on work order KA97086. The second circuit outage on 1/12/2024 caused 43% of the circuit's customer interruptions due to a tree falling on one of the primary phases during a storm breaking the top of pole number 109743. Repairs were made on work order number KA90664. Several device and other fused tap and transformer outages caused the remaining 14% of the circuit's customer interruptions. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2023. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	183010
Division:	ARCHVIEW
ZIP Codes(s) Served:	63119
Customers Served:	964
Customer Interruptions (CI):	1,930
SAIFI Value:	2.00
SAIDI Value:	449

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	5	0.26%	1
LIGHTNING	1	0.05%	1
TREE	1,924	99.69%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

A dead tree broke a crossarm and pinned it on a transformer in the rear at 7765 Ravensridge Dr taking out the circuit on 1/10/24. Repairs were made on KA90125. This outage caused approximately 50% of the circuit's customer interruptions. Another circuit outage occurred on 7/16/2024 when a tree made contact with the backbone primary (no location provided). It was cleared and the circuit was re-energized on OAS #241985842. This outage caused approximately 50% of the circuit's customer interruptions. One other transformer outage and one other single outage caused the remaining <1% of the circuit's customer interruptions. There are no recurring problems identified on the circuit and no further work is required at this time. The last overhead visual inspection was completed in 2023, and the next overhead visual inspection is planned for 2027. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle patrol was completed in 2023, and a full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	189052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63020, 63028
Customers Served:	837
Customer Interruptions (CI):	1,248
SAIFI Value:	1.49
SAIDI Value:	429

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	109	8.73%	19
LIGHTNING	8	0.64%	4
TREE	1,103	88.38%	22
ANIMAL	17	1.36%	8
OTHER	1	0.08%	1
UNKNOWN	10	0.80%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Tree related outages accounted for 88% of the customer interruptions in 2024. A full-cycle tree trim is planned for 2025, which should help alleviate a large portion of the tree related issues on this circuit. There are no recurring problems identified on the circuit and no further work is required at this time. A underground visual inspection is also planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	196005
Division:	ARCHVIEW
ZIP Codes(s) Served:	63119, 63143
Customers Served:	476
Customer Interruptions (CI):	811
SAIFI Value:	1.70
SAIDI Value:	216

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	271	33.42%	4
PUBLIC	527	64.98%	3
TREE	13	1.60%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Public damage to a pole at 4118 Shrewsbury Ave led to a circuit outage on 11/12/2024. Repairs were made on KB50655. This outage caused 58% of the circuit's customer interruptions. The C phase of 600A solid blade switch D7955 (ES Lenox, 2PS Big Bend) burned up on 10/17/24. Repairs were made on KB45492. This outage caused 18% of the circuit's customer interruptions. The A phase of 600A solid blade switch D7611 (ES Big Bend, 3N Laclede Station Rd) burned up on 11/17/24. Repairs were made on KB51669. This outage caused 15% of the circuit's customer interruptions. Several device other fused tap and transformer outages caused the remaining 10% customer interruptions. There are no recurring problems identified on the circuit and no further work is required at this time. The last overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022, and a mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	201008
Division:	GATEWAY
ZIP Codes(s) Served:	63121, 63135
Customers Served:	132
Customer Interruptions (CI):	265
SAIFI Value:	2.01
SAIDI Value:	808

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	92	34.72%	6
TREE	160	60.38%	9
OTHER	13	4.91%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 60% of all customer interruptions were due to tree contact. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2024. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	209052
Division:	GATEWAY
ZIP Codes(s) Served:	63044, 63045
Customers Served:	239
Customer Interruptions (CI):	539
SAIFI Value:	2.26
SAIDI Value:	154

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	308	57.14%	8
LIGHTNING	1	0.19%	1
PUBLIC	1	0.19%	1
EQUIPMENT/UG	76	14.10%	4
TREE	153	28.39%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There were two incidents that caused outages to the entire circuit and two additional incidents accounted for 25% of customer interruptions on the circuit. On 3/25/2024, a public vehicle took down two phases on the 12kv circuit. Repairs were made at the time of the outage on OAS #240851822. A large limb fell onto the 12kv circuit on 5/22/2024 which resulted in an outage to most of the customers on the circuit. Repairs were made at the time of the outage on OAS #24143A849. A cable faulted resulted in 13% of customer interruptions for the year. Repairs were made at the time of the outage on OAS #240860113. An overhead malfunction occurred which resulted in 13% of customer interruptions for the year made at the time of the outage on OAS #241272117. There are no recurring problems on this circuit and no other work is required currently. A detailed underground inspection is scheduled for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024, and a full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	214053
Division:	GATEWAY
ZIP Codes(s) Served:	63138, 63033, 63034
Customers Served:	807
Customer Interruptions (CI):	1,247
SAIFI Value:	1.55
SAIDI Value:	138

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	640	51.32%	8
EQUIPMENT/UG	12	0.96%	2
TREE	561	44.99%	9
ANIMAL	33	2.65%	3
OTHER	1	0.08%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 76% of customer interruptions were due to a broken tree landing on primary and breaking a jumper on 3/30/2024. The tree was removed on OAS #240900227, and repairs to the jumper where made on #240900253. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2023. An overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	215054
Division:	GATEWAY
ZIP Codes(s) Served:	63033, 63136
Customers Served:	1,213
Customer Interruptions (CI):	2,083
SAIFI Value:	1.72
SAIDI Value:	126

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	483	23.19%	12
LIGHTNING	3	0.14%	1
PUBLIC	1,062	50.98%	2
EQUIPMENT/UG	161	7.73%	2
TREE	331	15.89%	13
ANIMAL	40	1.92%	6
OTHER	3	0.14%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 51% of customer interruptions were due to a vehicle incident hitting a pole on 9/27/24. Repairs were made on OAS #242714704 and #242714404. Another 8% of customer interruptions were due to a faulty recloser. The recloser was replaced on 9/24/24 on OAS #242681552. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2023. An overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	216051
Division:	CENTRAL MO
ZIP Codes(s) Served:	65049, 65065
Customers Served:	218
Customer Interruptions (CI):	339
SAIFI Value:	1.56
SAIDI Value:	352

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
LIGHTNING	1	0.29%	1
PUBLIC	197	58.11%	1
EQUIPMENT/UG	16	4.72%	2
TREE	1	0.29%	1
ANIMAL	11	3.24%	1
OTHER	113	33.33%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

One event accounted for 91% of the customer interruptions in 2024. The issue was caused by a public vehicle breaking 2 poles. An additional outage was taken to close loops after the vehicle accident. An overhead visual inspection was completed as part of the WPC review. Division Engineering identified a need for additional animal guarding and transformer fusing that will all be addressed under work order KB76269. An underground visual inspection was completed in 2022. A groundline inspection is planned for 2028, and underground visual inspection is planned for 2026. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. The most recent full-cycle tree trim was completed in 2022 while a mid-cycle patrol was completed in 2024. The next full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	229052
Division:	GATEWAY
ZIP Codes(s) Served:	63034, 63031, 63042
Customers Served:	1,173
Customer Interruptions (CI):	2,296
SAIFI Value:	1.96
SAIDI Value:	212

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,269	55.27%	12
LIGHTNING	1	0.04%	1
PUBLIC	1	0.04%	1
EQUIPMENT/UG	124	5.40%	7
TREE	873	38.02%	15
ANIMAL	23	1.00%	7
UNKNOWN	5	0.22%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 50% of customer interruptions were due to a broken pole on 10/29/24. Repairs were made on OAS #243033422. Another 35% of interruptions were due to tree branches breaking cross arms on two separate poles on 11/5/24 and repairs were made on OAS #243101512. There are no reoccurring problems identified on the circuit and no further work is required at this time. An overhead visual inspection was completed in 2022. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	257003
Division:	ARCHVIEW
ZIP Codes(s) Served:	63109, 63123
Customers Served:	753
Customer Interruptions (CI):	1,813
SAIFI Value:	2.41
SAIDI Value:	178

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	213	11.75%	7
EQUIPMENT/UG	753	41.53%	3
TREE	767	42.31%	4
EMPLOYEES	68	3.75%	1
UNKNOWN	12	0.66%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

A section of DIP-Jamieson-1 failed on 4/6/2024 and took out the circuit. The cable was isolated and repaired on KB05987. This outage caused 41% of the circuit's customer interruptions. Another circuit outage occurred on 8/12/2024 when a tree made contact with the backbone primary at 6489 Kinsey Place. It was removed, and the circuit was re-energized on OAS #242254137. This outage caused 41% of the circuit's customer interruptions. Several other fused tap and transformer outages caused the remaining 18% of the circuit's customer interruptions. There are no recurring problems identified on the circuit and no further work is required at this time. The last overhead visual inspection was completed in 2021, and the next overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025, and a full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	258052
Division:	GATEWAY
ZIP Codes(s) Served:	63122, 63026, 63088
Customers Served:	613
Customer Interruptions (CI):	1,341
SAIFI Value:	2.19
SAIDI Value:	290

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	58	4.33%	9
LIGHTNING	10	0.75%	1
EQUIPMENT/UG	616	45.94%	4
TREE	645	48.10%	5
ANIMAL	2	0.15%	2
OTHER	8	0.60%	2
UNKNOWN	2	0.15%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents accounted for 84% of the customer interruptions in 2024. A circuit outage on OAS #243091656 caused 45% of the circuit's customer interruptions due to an underground malfunction on primary cable during the rain. Repairs were made on work order KB49420. A device outage on intelliruptor R1490 caused 39% of the circuit's customer interruptions due to a tree falling down during a thunderstorm and knocking two phases and the neutral down by pole number 383267. Repairs were made on work order KB01544. Several device and other fused tap and transformer outages caused the remaining 16% of the circuit's customer interruptions. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	264053
Division:	GATEWAY
ZIP Codes(s) Served:	63146, 63141, 63124
Customers Served:	1,224
Customer Interruptions (CI):	1,879
SAIFI Value:	1.54
SAIDI Value:	273

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	181	9.63%	9
PUBLIC	6	0.32%	1
EQUIPMENT/UG	76	4.04%	6
TREE	1,447	77.01%	9
EMPLOYEES	20	1.06%	1
ANIMAL	88	4.68%	7
OTHER	1	0.05%	1
UNKNOWN	60	3.19%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

One incident accounted for 65% of the customer interruptions in 2024. A circuit outage on OAS #241983182 caused 65% of the circuit's customer interruptions due to a tree falling on the primary. Repairs were made on work order KB27532. Several device and other fused tap and transformer outages caused the remaining 35% of the circuit's customer interruptions. Underground cable replacement for an apartment complex is being designed under KA93053. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2023. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022, and a full-cycle tree trim was completed in 2024. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	267060
Division:	GATEWAY
ZIP Codes(s) Served:	63017, 63141
Customers Served:	328
Customer Interruptions (CI):	651
SAIFI Value:	1.99
SAIDI Value:	269

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	31	4.76%	4
PUBLIC	20	3.07%	2
TREE	577	88.63%	4
ANIMAL	22	3.38%	6
OTHER	1	0.15%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There were three tree-related incidents that accounted for over 88% of customer interruptions in 2024. On 1/12/2024, a large branch made contact with the 12kv circuit which resulted in an outage to most customers on the circuit. Repairs were made on OAS #240121992. Later that month, a large branch fell and took down a 12kv circuit which resulted in an outage to most of the customers on the circuit. Repairs were made on OAS #240222260. On 5/13/2024, a large branch fell and took down a 12kv circuit and which resulted in an outage to 40% of the circuit. Repairs were made on OAS #240222260. On 5/13/2024, a large branch fell and took down a 12kv circuit and which resulted in an outage to 40% of the circuit. Repairs were made on OAS #241343447. There are no recurring problems on this circuit and no other work is required currently. A detailed underground is scheduled for 2025, and a groundline is planned for 2025. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025, and a mid-cycle tree patrol is planned for 2028.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	276051
Division:	ARCHVIEW
ZIP Codes(s) Served:	63123, 63125
Customers Served:	901
Customer Interruptions (CI):	1,923
SAIFI Value:	2.13
SAIDI Value:	184

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,810	94.12%	12
PUBLIC	2	0.10%	1
TREE	108	5.62%	8
ANIMAL	3	0.16%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents accounted for 86% of the customer interruptions in 2024. One issue was due to the circuit tripping open at the substation on a calm day. The circuit was reenergized and held; no issue was found. The second incident was during a storm; the cause of the outage was due to a possible lightning strike but could not be verified. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	276052
Division:	ARCHVIEW
ZIP Codes(s) Served:	63125, 63123
Customers Served:	1,387
Customer Interruptions (CI):	3,627
SAIFI Value:	2.62
SAIDI Value:	293

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2,424	66.83%	10
EQUIPMENT/UG	995	27.43%	4
TREE	160	4.41%	8
ANIMAL	46	1.27%	4
OTHER	2	0.06%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents accounted for 87% of the customer interruptions in 2024. One issue was due to the circuit tripping open at the substation during a rain storm. The circuit was inspected at the time and no issue was found. It was reenergized and held. The second incident was to an underground cable failure that was repaired on work request KB03912. The third incident was due to primary coming down during a storm and was repaired on OAS #242720940. Additional fusing will be added to this circuit on KB65936; this work is to be completed in 2025. An underground detail inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	276053
Division:	ARCHVIEW
ZIP Codes(s) Served:	63125, 63123, 65054
Customers Served:	1,223
Customer Interruptions (CI):	4,604
SAIFI Value:	3.77
SAIDI Value:	484

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,642	35.66%	15
LIGHTNING	10	0.22%	2
EQUIPMENT/UG	28	0.61%	2
TREE	1,662	36.10%	6
ANIMAL	48	1.04%	2
OTHER	1,084	23.54%	1
UNKNOWN	130	2.82%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two outage events (five incidents total) accounted for 91% of the customer interruptions in 2024. One issue was due to a tree falling into the primary during a rainstorm, damaging poles and primary conductor. Repairs were made on work request KB49819. The second issue was due to a tree that broke and damaged primary conductor at a separate location. Repairs were made on OAS #241292595. Two new automated switches will be added to this circuit in 2025 as part of the distribution automation program. An overhead visual inspection was completed in 2022. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	279053
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63017, 63141, 63005
Customers Served:	511
Customer Interruptions (CI):	959
SAIFI Value:	1.88
SAIDI Value:	171

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	507	52.87%	4
PUBLIC	5	0.52%	1
EQUIPMENT/UG	292	30.45%	1
TREE	16	1.67%	1
ANIMAL	109	11.37%	9
UNKNOWN	30	3.13%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There was one circuit outage and one device outage that accounted for 82% of the customer interruptions in 2024. The circuit outage was due to a pole that broke located along Broomstick Lane near Clayton Road. The pole was replaced under work order KB19246. The device outage was due to an underground cable failure located near South Outer Forty Road and The Hamptons Lane. Repairs to the underground cable were completed under work order KB07143. The remaining device outages and transformer outages were largely due to overhead equipment malfunctions, tree contacts, and animal contacts. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	283055
Division:	GATEWAY
ZIP Codes(s) Served:	63146, 63088
Customers Served:	345
Customer Interruptions (CI):	516
SAIFI Value:	1.50
SAIDI Value:	603

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	446	86.43%	6
EQUIPMENT/UG	16	3.10%	2
TREE	42	8.14%	4
EMPLOYEES	12	2.33%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents account for 82% of the customer interruptions in 2024. A device outage on 1/14/2024 caused 58% of the circuit's customer interruptions due to an overhead malfunction at intelliruptor R1124. Intelliruptor was reset on OAS #240140174. A device outage caused 12% of the circuit's customer interruptions due to one span of primary cut during the rain. Repairs were made on work order KB32945. A device outage caused 12% of the circuit's customer interruptions due to two jumpers burning. Repairs were made on OAS #241439388. Several device and other fused tap and transformer outages caused the remaining 18% of the circuit's customer interruptions. There are no reoccurring problems identified on the circuit and no further work is required at this time. Underground visual and overhead visual inspections were completed in 2021. An underground visual inspection is planned for 2025. A groundline inspection is als planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	289054
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63025, 63069, 63051, 63132, 63136, 63304
Customers Served:	988
Customer Interruptions (CI):	2,792
SAIFI Value:	2.83
SAIDI Value:	521

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2,401	86.00%	19
LIGHTNING	2	0.07%	1
TREE	259	9.28%	16
EMPLOYEES	1	0.04%	1
ANIMAL	45	1.61%	13
OVERLOAD	42	1.50%	1
OTHER	1	0.04%	1
UNKNOWN	41	1.47%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There was one circuit outage and two device outages that accounted for the 63% of the customer interruptions in 2024. The circuit outage and one of the device outages were due to an overhead equipment malfunction located along State Highway FF near John McKeever Road during extreme cold weather conditions. The overhead equipment was repaired under work order KA90788. The second device outage was due to a broken pole located along State Highway FF near Sommertyme Drive. The pole was replaced under work order KB40531. The remaining smaller device outages were largely due to overhead equipment malfunctions and tree contacts. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	293003
Division:	ARCHVIEW
ZIP Codes(s) Served:	63144
Customers Served:	70
Customer Interruptions (CI):	156
SAIFI Value:	2.23
SAIDI Value:	156

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	68	43.59%	1
TREE	3	1.92%	1
OTHER	17	10.90%	1
UNKNOWN	68	43.59%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There were two incidents that accounted for 87% of customer interruptions in 2024. The first was a circuit outage due to an unknown cause. The circuit was patrolled at the time of the outage and no issues were found. The second was a circuit outage due to a wind storm. An underground visual inspection was completed in 2023. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	383051
Division:	GATEWAY
ZIP Codes(s) Served:	63376, 63301
Customers Served:	594
Customer Interruptions (CI):	1,738
SAIFI Value:	2.93
SAIDI Value:	255

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
PUBLIC	559	32.16%	1
EQUIPMENT/UG	1,174	67.55%	2
ANIMAL	4	0.23%	3
UNKNOWN	1	0.06%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Sixty-eight percent (68%) of the customer interruptions in 2024 were the result of two incidents caused by underground primary faults. Work order KA95604 was completed to repair the primary fault between Switch 21402 and Switch 1378 for the outage which occurred on 02/14/2024. Work order KB25324 was completed to repair the primary fault between Switch 21402 and Switch 1378 for the outage which occurred on 07/05/2024. Thirty-two percent (32%) of the customer interruptions in 2024 were the result of one incident caused by the public. Work order KB35231 was completed to repair the primary cable from LAT-9776Y out of SWPD 9114 to PAD 9776 X for the outage due to the public excavation. The repairs were corrected at the time of the outage. There are no recurring problems on this circuit and no other work is required currently. A full-cycle trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	392052
Division:	CENTRAL MO
ZIP Codes(s) Served:	65101, 65010, 65102, 65109
Customers Served:	1,009
Customer Interruptions (CI):	2,659
SAIFI Value:	2.64
SAIDI Value:	220

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	439	16.51%	6
LIGHTNING	19	0.71%	1
EQUIPMENT/UG	8	0.30%	6
TREE	1,002	37.68%	2
ANIMAL	181	6.81%	6
OTHER	1,010	37.98%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents that accounted for 67% of customer interruptions were caused by a single event when a tree fell on a primary line, which resulted in a circuit outage. A phase balancing study was completed as part of the WPC review. The study identified some phase imbalance that will be addressed under work order KB75814. Groundline and underground visual inspections are planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024, and a full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	393055
Division:	GATEWAY
ZIP Codes(s) Served:	63121, 63134
Customers Served:	712
Customer Interruptions (CI):	1,193
SAIFI Value:	1.68
SAIDI Value:	321

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	497	41.66%	3
LIGHTNING	29	2.43%	2
EQUIPMENT/UG	515	43.17%	2
TREE	135	11.32%	8
EMPLOYEES	10	0.84%	2
ANIMAL	7	0.59%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

On 12/15/2024, a primary cable termination burned causing 34% of customer interrptions for the year. Repairs were made on OAS #243500135. On 4/2/2024, an overhead equipment malfunction at an overhead switch caused an additional 34% of customer interruptions. Repairs were made on OAS #240930109. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2023. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	465053
Division:	SEMO
ZIP Codes(s) Served:	63877, 63839, 63853
Customers Served:	636
Customer Interruptions (CI):	1,278
SAIFI Value:	2.01
SAIDI Value:	200

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	445	34.82%	18
LIGHTNING	2	0.16%	2
EQUIPMENT/UG	15	1.17%	1
TREE	481	37.64%	15
ANIMAL	70	5.48%	8
OTHER	261	20.42%	1
UNKNOWN	4	0.31%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There was an incident where a primary jumper burned loose and caused an outage that was repaired on work request KB32523. There was an incident where a primary phase came loose and tripped a line recloser. There was an incident where primary had to be repaired due to strom damage on work request KB25290. There were many outages caused by tree contact which will be addressed at the upcoming tree trim. A groundline inspection was completed in 2024. An underground visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	466055
Division:	SEMO
ZIP Codes(s) Served:	63851, 63873, 63879
Customers Served:	142
Customer Interruptions (CI):	264
SAIFI Value:	1.86
SAIDI Value:	207

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	118	44.70%	2
LIGHTNING	132	50.00%	2
TREE	12	4.55%	2
OTHER	1	0.38%	1
UNKNOWN	1	0.38%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

One incident accounted for nearly 50% of customer interruptions and occurred when lightning tripped a breaker at the substation causing an outage. There was also an outage where we had to repair primary on work request KB35135. This outage accounted for 44% of customer interruptions. There were several incidents caused by tree issues that will be addressed at the upcoming tree trim. A underground detail inspection was completed in 2023. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	475053
Division:	SEMO
ZIP Codes(s) Served:	63650, 63663, 63621, 63656
Customers Served:	249
Customer Interruptions (CI):	443
SAIFI Value:	1.78
SAIDI Value:	227

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	130	29.35%	7
LIGHTNING	99	22.35%	3
PUBLIC	3	0.68%	1
TREE	169	38.15%	5
ANIMAL	21	4.74%	8
OTHER	21	4.74%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

The incident that resulted in the largest amount of customer minutes out in 2024 was due to a lightning strike that damaged a switch. This incident was responsible for 22% of the customer interruptions in 2024. Another isolated incident of a jumper failing was responsible for 19% of the customer interruptions. Two tree-related incidents together accounted for 35% of customer interruptions and occurred during storms. There are no reoccurring problems identified on this circuit and no further work is required at this time. Both an underground detail inspection and an overhead visual inspection were completed on this circuit in 2023. All identified repairs from those inspections were completed in 2024 in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	483051
Division:	SEMO
ZIP Codes(s) Served:	63624, 63650, 63656, 63637, 63663, 63137, 63136, 63654
Customers Served:	767
Customer Interruptions (CI):	1,435
SAIFI Value:	1.87
SAIDI Value:	154

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	514	35.82%	24
LIGHTNING	20	1.39%	8
PUBLIC	721	50.24%	2
TREE	158	11.01%	5
ANIMAL	14	0.98%	7
OTHER	3	0.21%	1
UNKNOWN	5	0.35%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Over 50% of customer interruptions in 2024 were due to one incident of public attempted theft/vandalism. When the patrons were trying to remove wire for scrap, they cut a regulator ground wire causing an outage to the entire circuit. There are no reoccurring problems identified on this circuit and no further work is required at this time. An underground visual inspection was completed in 2024. Any identified repair work as a result of the inspection will be completed in 2025 in accordance with Ameren Missouri's infrastructure inspecion policy. A full-cycle tree trim was completed in 2023, and a mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	485051
Division:	SEMO
ZIP Codes(s) Served:	63071, 63030, 63023
Customers Served:	456
Customer Interruptions (CI):	766
SAIFI Value:	1.68
SAIDI Value:	422

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	160	20.89%	10
LIGHTNING	20	2.61%	1
PUBLIC	443	57.83%	1
TREE	118	15.40%	4
ANIMAL	13	1.70%	7
OTHER	4	0.52%	1
UNKNOWN	8	1.04%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There was one incident where a public vehicle caused damage that included breaking a pole on the 3-phase backbone which accounted for nearly 58% of the customer interruptions on this circuit in 2024. The tree issues were addressed as a full-cycle tree trim was completed in late 2024. We have also identified a couple of longer single phase sections that we will be installing reclosers on to help further mitigate tree issues. An underground detail inspection was completed in 2023. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections was completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	487051
Division:	SEMO
ZIP Codes(s) Served:	63626, 63664, 63030, 63071
Customers Served:	77
Customer Interruptions (CI):	180
SAIFI Value:	2.34
SAIDI Value:	205

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	121	67.22%	5
TREE	46	25.56%	2
ANIMAL	11	6.11%	2
UNKNOWN	2	1.11%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

There are no reoccuring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2023. All repair work identified as a result of the inspection was completed in 2024 in accordance with Ameren Missouri's infrastructure inspection policy. There is a mid-cycle tree patrol planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	506056
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63090, 63304
Customers Served:	1,046
Customer Interruptions (CI):	2,118
SAIFI Value:	2.03
SAIDI Value:	161

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2,034	96.03%	8
LIGHTNING	4	0.19%	4
TREE	34	1.61%	2
ANIMAL	46	2.17%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two separate equipment malfunctions accounted for 96% of customer interruptions. The first was a broken pole that was replaced on KB11982. The second was a loose primary that was repaired on OAS #240584137. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2024. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	507052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63069, 63015, 63089, 63072
Customers Served:	212
Customer Interruptions (CI):	384
SAIFI Value:	1.81
SAIDI Value:	204

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	155	40.36%	7
LIGHTNING	2	0.52%	1
PUBLIC	3	0.78%	1
TREE	221	57.55%	6
ANIMAL	3	0.78%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Most of the customer interruptions are attributed to various incidents involving vegetation and broken trees contacting the primary. These vegetation incidents were repaired on OAS #241692259, OAS #241842456, OAS #241293735, KB05963, and KB39044, respectively. There was a device outage that accounted for 18% of customer interruptions. It was due to a broken crossarm insulator that was repaired on OAS #240642697. There was also down primary that was repaired on OAS #241781476; that outage accounted for 14% of customer interruptions. Since a full cycle tree trim was completed in 2024, there are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	510052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63084, 63077, 63089, 63072
Customers Served:	697
Customer Interruptions (CI):	1,034
SAIFI Value:	1.48
SAIDI Value:	393

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	313	30.27%	9
LIGHTNING	3	0.29%	1
PUBLIC	9	0.87%	1
EQUIPMENT/UG	4	0.39%	4
TREE	537	51.93%	11
ANIMAL	7	0.68%	6
OTHER	161	15.57%	6

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Most of the customer interruptions are attributed to various incidents involving vegetation and broken trees contacting the primary. These vegetation incidents were repaired on KB13757, OAS #243051015, OAS #241312759, OAS #241312762, and OAS #241860304, respectively. We will reach out to our vegetation group and have them patrol downstream of the device locations associated with the vegetation outages mentioned above and clear any areas of concern. Equipment malfunctions were the next leading cause of customer interruptions. One incident in particular involved b-phase primary burning down in the woods and causing an outage. It was repaired on KB56613. An underground visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	516051
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63016, 63051
Customers Served:	178
Customer Interruptions (CI):	270
SAIFI Value:	1.52
SAIDI Value:	229

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	26	9.63%	2
EQUIPMENT/UG	1	0.37%	1
TREE	212	78.52%	2
ANIMAL	31	11.48%	6

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two tree-related incidents accounted for close to 79% of the customer interruptions in 2024. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025, and a mid-cycle tree patrol is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	516055
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63016, 63051, 63015, 63069, 63025
Customers Served:	857
Customer Interruptions (CI):	3,455
SAIFI Value:	4.03
SAIDI Value:	340

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	691	20.00%	19
LIGHTNING	4	0.12%	1
PUBLIC	365	10.56%	2
TREE	1,963	56.82%	27
ANIMAL	42	1.22%	9
OTHER	17	0.49%	2
UNKNOWN	373	10.80%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Trees-related issues were the cause of 57% of the customer interruptions. These trees were located outside of the trimming ROW. Equipment failure consisted of 20% of the customer interruptions and repairs where made on OAS trouble tickets and work order KA99200. A public vehicle outage accounted for approximatley 10% of the customers interrupted and repairs were made on KB49251. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	517051
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63050
Customers Served:	850
Customer Interruptions (CI):	1,933
SAIFI Value:	2.27
SAIDI Value:	282

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1	0.05%	1
PUBLIC	23	1.19%	2
EQUIPMENT/UG	84	4.35%	2
TREE	935	48.37%	4
ANIMAL	4	0.21%	4
OTHER	835	43.20%	2
UNKNOWN	51	2.64%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Four incidents accounted for 90% of the customer interruptions in 2024. Two incidents that accounted for 47% of the customer interruptions were due to broken trees. The first issue was caused by a broken tree that caused broken primary, leading to a recloser to fault open. This was repaired on KA90691. The second issue was caused by a broken tree that fell on and broke OH primary, and this was repaired on OAS #241774984. The other two outages that accounted for 43% of the customer interruptions were due to an unusual and unexpected loading situation from some switching performed by our Operating group. On the morning of 3/22/24, there was planned switching on BAIL-76 for a crew to set a new pole. This work required Butcher Branch substation to be cleared, meaning the 51 and 52 circuits needed to be tied together and put on 168-57. Due to some unusually cold weather on that morning, line voltages dropped low enough to register as an extended outage even though no customers actually lost power at any point. Emergency switching was done immediately to alleviate this loading issue as well. An underground detailed inspection is scheduled for 2025, and a groundline inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed



in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is scheduled for 2025, and a full-cycle tree trim is planned for 2028.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	546051
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63051, 63016, 63049
Customers Served:	600
Customer Interruptions (CI):	1,112
SAIFI Value:	1.85
SAIDI Value:	708

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	48	4.32%	14
PUBLIC	16	1.44%	1
TREE	1,027	92.36%	15
EMPLOYEES	1	0.09%	1
ANIMAL	19	1.71%	2
UNKNOWN	1	0.09%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Tree-related incidents accounted for approximately 92% of the customers interrupted. There are two (2) DA projects to help sectionalize the circuit (KB70261 and KB70266) planned for 3Q25. An underground visual inspection was completed in 2022. An overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	546052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63051, 63025
Customers Served:	590
Customer Interruptions (CI):	921
SAIFI Value:	1.56
SAIDI Value:	124

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	503	54.61%	4
LIGHTNING	13	1.41%	4
PUBLIC	361	39.20%	1
TREE	38	4.13%	5
EMPLOYEES	1	0.11%	1
ANIMAL	3	0.33%	2
UNKNOWN	2	0.22%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

A public vehicle incident accounted for 39% of customer interruptions. Repairs were made on KB15708. There were various equipment malfunction outages. These were repaired on jobs KB56833, OAS #241914040, and OAS #241991379. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2024. An overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	546056
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63051, 63049, 63052, 63104, 63114, 63376
Customers Served:	1,030
Customer Interruptions (CI):	1,592
SAIFI Value:	1.55
SAIDI Value:	126

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,261	79.21%	8
LIGHTNING	2	0.13%	2
EQUIPMENT/UG	41	2.58%	3
TREE	162	10.18%	8
EMPLOYEES	1	0.06%	1
ANIMAL	125	7.85%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Equipment malfunctions and tree-related issues were responsible for 92% of customer interruptions. Equipment repairs were made on jobs KB10091, KB91774, OAS #243100204, OAS #241201843, and OAS #243101559. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is planned for 2025. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025. A mid-cycle tree patrol is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	555053
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63084, 63013, 63089, 63090
Customers Served:	994
Customer Interruptions (CI):	1,794
SAIFI Value:	1.81
SAIDI Value:	137

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	19	1.06%	6
PUBLIC	1,446	80.60%	3
EQUIPMENT/UG	1	0.06%	1
TREE	126	7.02%	3
ANIMAL	61	3.40%	6
OTHER	4	0.22%	3
UNKNOWN	137	7.64%	6

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Eighty-one percent (81%) of customer interruptions were due to public vehicle accidents involving Ameren facilities. There was a broken neutral due to public vehicle contact (claim# 1920X). Repairs were made on KB24926. There was a broken pole and guy wire due to public vehicle contact (claim# 3010X). Repairs were made on KB38662. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	560057
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63049, 63026
Customers Served:	859
Customer Interruptions (CI):	5,866
SAIFI Value:	6.83
SAIDI Value:	664

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,718	29.29%	4
EQUIPMENT/UG	60	1.02%	6
TREE	1,850	31.54%	3
ANIMAL	20	0.34%	4
OTHER	2,135	36.40%	3
UNKNOWN	83	1.41%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two incidents were circuit outages due to overhead malfunctions during storms. Repairs were made on KB49377 and OAS #241870719. Two circuit outages were taken to make repairs to drop line section on OAS #241880136 and #241880001. The remaining two circuit outages were due to trees. There is a job to install DA on work order KA93405. There is also a fuse coordination project planned on work order KB50806. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2023. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	576051
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63052, 63051
Customers Served:	508
Customer Interruptions (CI):	770
SAIFI Value:	1.52
SAIDI Value:	174

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	604	78.44%	7
PUBLIC	9	1.17%	1
EQUIPMENT/UG	1	0.13%	1
TREE	144	18.70%	6
ANIMAL	5	0.65%	2
UNKNOWN	7	0.91%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Four incidents accounted for 91% of the customers incidents. The first was during a storm where primary came down and was repaired on KB05246. The second incident was a tree taking down primary during a storm and was repaired on job KB42357. The third indicent was due to a jumper burning up and was repaired on job KB57324. The fourth was a downed primary line during a storm and was repaired on OAS#241913618. As part of the CDIS program there were several poles also replaced on KA18832, 18827, 18830, and 18829. There was also a capacitor bank replaced on job KB34771. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	576052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63052, 63049, 63026, 63010, 63118, 63123
Customers Served:	1,157
Customer Interruptions (CI):	1,937
SAIFI Value:	1.67
SAIDI Value:	471

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	290	14.97%	10
EQUIPMENT/UG	13	0.67%	3
TREE	1,617	83.48%	14
EMPLOYEES	1	0.05%	1
ANIMAL	14	0.72%	4
UNKNOWN	2	0.10%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Three incidents due to trees accounted for over 78% of customer interruptions. Repairs for tree related outages were made on jobs KB25239, OAS #241860862, and KB28214. Work to address outages due to equipment malfunctions were made on work orders OAS #242041940, OAS #241913568, and KB53029. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	581052
Division:	CENTRAL MO
ZIP Codes(s) Served:	65065
Customers Served:	2
Customer Interruptions (CI):	4
SAIFI Value:	2.00
SAIDI Value:	138

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2	50.00%	1
OTHER	2	50.00%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two outages accounted for 100% of the customer interruptions in 2024. These outages were taken as the Grand Glaize was being upgraded to a dual unit substation and cutovers on new circuit lines were done. No additional work is planned. An underground visual inspection was completed in 2023 while the next underground visual inspection is planned for 2027. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. The most recent full-cycle tree trim was completed in 2021 while a mid-cycle tree patrol was completed in 2023. The next full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	607051
Division:	SEMO
ZIP Codes(s) Served:	63736, 63742, 63780, 63758
Customers Served:	471
Customer Interruptions (CI):	805
SAIFI Value:	1.71
SAIDI Value:	141

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	410	50.93%	11
EQUIPMENT/UG	18	2.24%	2
TREE	358	44.47%	7
ANIMAL	15	1.86%	3
OTHER	4	0.50%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Although the circuit was trimmed in 2022, many outages occured due to tree contact as well as overhead equipment issues. Currently, there is a Smart Energy Plan project KA47188 that is under construction to rebuild this underbuild section of 12kV from single phase to three phase from Benton to Kelso. This SEP project also includes storm hardening and tree trimming the circuit. An underground visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	637054
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63376, 63301, 63303
Customers Served:	525
Customer Interruptions (CI):	1,033
SAIFI Value:	1.97
SAIDI Value:	194

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	642	62.15%	23
LIGHTNING	3	0.29%	2
EQUIPMENT/UG	1	0.10%	1
TREE	380	36.79%	8
ANIMAL	7	0.68%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 57% (four events) of customer interruptions were caused by overhead equipment which was either due to a wire issue or a broken fuse switch. A field review of the three-phase sections of the circuit did not show a need to replace overhead equipment at this time. An underground visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	642056
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63366, 63367, 63109, 63135
Customers Served:	1,552
Customer Interruptions (CI):	3,316
SAIFI Value:	2.14
SAIDI Value:	69

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	275	8.29%	15
PUBLIC	1,548	46.68%	4
EQUIPMENT/UG	22	0.66%	5
TREE	171	5.16%	2
ANIMAL	7	0.21%	2
OTHER	1,293	38.99%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, a circuit outage that accounted for 39% of customer interruptions was due to a public vehicle. There were three device outages that accounted for 13% of customer interruptions that were caused by either public vehicle, tree, or overhead equipment. Completed project KA73836 in 2024 to install one new 12.5kV intellirupter at the normal open tie switch to O'Fallon Hills 642053 circuit (west side of Old Bryan Rd & two poles north of Winged Foot Dr). Two more new 12.5kV Intellirupters are planned for 2025 to be installed on this circuit, 642054, projects KA73837 & KA73838. An underground detail inspection was completed in 2024. A mid-cycle tree patrol was completed in 2022. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	646052
Division:	SEMO
ZIP Codes(s) Served:	63701, 63126
Customers Served:	954
Customer Interruptions (CI):	1,745
SAIFI Value:	1.83
SAIDI Value:	165

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	386	22.12%	19
EQUIPMENT/UG	4	0.23%	1
TREE	1,251	71.69%	21
ANIMAL	97	5.56%	12
OTHER	6	0.34%	1
UNKNOWN	1	0.06%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

The majority of customer interruptions were associated with tree/vegetation issues. We will be installing 3 reclosers and coordinating fuses on work request KB74588. A underground detail inspection was completed in 2024. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed on 1/16/2025. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	652055
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63390, 63031, 63136, 63383, 63385
Customers Served:	1,239
Customer Interruptions (CI):	2,445
SAIFI Value:	1.97
SAIDI Value:	345

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	794	32.47%	5
LIGHTNING	8	0.33%	2
EQUIPMENT/UG	1	0.04%	1
TREE	416	17.01%	4
ANIMAL	4	0.16%	1
OTHER	1,173	47.98%	3
UNKNOWN	49	2.00%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, three incidents that accounted for 89% of customer interruptions were caused by trees and overhead equipment during thunderstorms. Plans are being reviewed to add five Intellirupters either on this circuit or at tie points to adjacent circuits in 2026. An underground visual inspection was completed in 2023. A groundline inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	653001
Division:	CENTRAL MO
ZIP Codes(s) Served:	65233, 65237, 65276
Customers Served:	53
Customer Interruptions (CI):	87
SAIFI Value:	1.64
SAIDI Value:	151

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	86	98.85%	3
OTHER	1	1.15%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two outages accounted for 98% of customer interruptions and occurred on this circuit due to damage to the primary. Repairs were made on OAS #241552416 and #240161116. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	656055
Division:	SEMO
ZIP Codes(s) Served:	63841, 63114, 63301
Customers Served:	1,131
Customer Interruptions (CI):	1,824
SAIFI Value:	1.61
SAIDI Value:	116

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	921	50.49%	10
LIGHTNING	27	1.48%	9
PUBLIC	1	0.05%	1
EQUIPMENT/UG	15	0.82%	7
TREE	117	6.41%	8
ANIMAL	45	2.47%	9
OTHER	689	37.77%	3
UNKNOWN	9	0.49%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

This circuit experienced two outages in 2024 that accounted for over 85% of customer interruptions. One of the outages (two incidents) was from extreme cold temperatures which caused two intellirpters to trip on 01/14/2024. The other outage (two incidents) was due to a thunderstorm causing overhead damage from trees on 06/26/2024. Contractor BBC was called in to help make the necessary repairs. Almost 9% of customer interruptions were due to many minor outages caused from tree and animal contact. Many of these incidents were due to a major tornado event on Memorial Day weekend. Much of this circuit had tree damage and emergency tree and line crews were called in for storm restoration. No further action is planned for 2025. An underground visual inspection was completed in 2023. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	676053
Division:	CENTRAL MO
ZIP Codes(s) Served:	65011, 65026
Customers Served:	498
Customer Interruptions (CI):	766
SAIFI Value:	1.54
SAIDI Value:	248

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	555	72.45%	12
LIGHTNING	21	2.74%	2
PUBLIC	31	4.05%	1
EQUIPMENT/UG	2	0.26%	2
TREE	59	7.70%	6
ANIMAL	42	5.48%	10
OTHER	34	4.44%	6
UNKNOWN	22	2.87%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

One incident accounted for 63% of customer interruptions and was due to a downed primary line during extreme cold conditions, which resulted in a circuit outage. Reliability improvements completed during 2024 included fusing and recloser upgrades, insulator replacements as well as additional tree trimming and animal guarding under work orders KB34909, KB45522, and KB62154. An overhead visual inspection was completed as part of the 2025 WPC review and identified a need for porcelain cutout replacements and additional transformer fusing that will be addressed under work order KB76266. A groundline inspection was completed in 2022, and an underground visual inspection in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	699051
Division:	SEMO
ZIP Codes(s) Served:	63801, 63824, 63767
Customers Served:	690
Customer Interruptions (CI):	1,372
SAIFI Value:	1.99
SAIDI Value:	107

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	621	45.26%	9
LIGHTNING	1	0.07%	1
PUBLIC	15	1.09%	1
EQUIPMENT/UG	17	1.24%	5
TREE	693	50.51%	2
ANIMAL	24	1.75%	2
UNKNOWN	1	0.07%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

An incident accounted for 49% of customer interruptions and occured due to tree contact during a thunder storm. There was a outage due to a substation issue with problems on the substation transformer W that accounted for 42% of customer interruptions. There were numerous outages caused by tree and animal contacts. There were several outages caused by bad underground cable. We replaced a section of bad underground cable on work request KB35601. A Smart Energy Plan project under KA63998 replaced over 1.6 miles of old underground cable in 2024 in a subdivision that had many faults. A underground detail inspection was completed in 2023. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	704002
Division:	CENTRAL MO
ZIP Codes(s) Served:	65265
Customers Served:	443
Customer Interruptions (CI):	1,098
SAIFI Value:	2.48
SAIDI Value:	232

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	13	1.18%	1
LIGHTNING	1	0.09%	1
PUBLIC	7	0.64%	1
TREE	1,076	98.00%	5
OTHER	1	0.09%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

The majority of customer interruptions on this circuit were caused by tree issues which totaled 98% of all customer interruptions on this circuit. Resulting work found during the WPC field review will be performed on KB75078 which includes adding transformer cutouts and replacing old inline switches. A underground detail inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	721052
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63547, 63533
Customers Served:	148
Customer Interruptions (CI):	225
SAIFI Value:	1.52
SAIDI Value:	118

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	4	1.78%	2
LIGHTNING	41	18.22%	1
PUBLIC	3	1.33%	1
TREE	39	17.33%	4
ANIMAL	15	6.67%	5
UNKNOWN	123	54.67%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, the top five incidents by customer interruptions were device outages caused by trees, lightning (unverified), and unknown causes. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	722052
Division:	CENTRAL MO
ZIP Codes(s) Served:	65243
Customers Served:	63
Customer Interruptions (CI):	130
SAIFI Value:	2.06
SAIDI Value:	1421

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	62	47.69%	2
TREE	68	52.31%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

The majority of customer interruptions were due to tree contact. A mid-cycle tree patrol was completed in 2024. Resulting work found during the WPC field review will be performed on KB73545 which includes a spot tree trim. Additionally, a full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	739051
Division:	CENTRAL MO
ZIP Codes(s) Served:	65257, 65259, 65270, 63121
Customers Served:	364
Customer Interruptions (CI):	763
SAIFI Value:	2.10
SAIDI Value:	488

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	409	53.60%	15
LIGHTNING	122	15.99%	3
EQUIPMENT/UG	1	0.13%	1
TREE	226	29.62%	7
OTHER	5	0.66%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Thunderstorm events resulted in over 80% of all customer interruptions. Resulting work found during the WPC field review will be performed on KB75079 which includes adding transformer fusing. A underground detail inspection was completed in 2024. A groundline inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	753053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63458, 63447, 63537
Customers Served:	85
Customer Interruptions (CI):	335
SAIFI Value:	3.94
SAIDI Value:	640

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	169	50.45%	4
TREE	82	24.48%	1
OTHER	84	25.07%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, two device outages caused by overhead equipment accounted for almost 50% of customer interruptions. An underground visual inspection was completed in 2023. A groundline inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	760051
Division:	CENTRAL MO
ZIP Codes(s) Served:	64624, 64656, 64638, 64686, 64664
Customers Served:	417
Customer Interruptions (CI):	1,111
SAIFI Value:	2.66
SAIDI Value:	234

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,079	97.12%	11
PUBLIC	1	0.09%	1
EQUIPMENT/UG	3	0.27%	1
TREE	7	0.63%	2
ANIMAL	8	0.72%	6
OTHER	2	0.18%	2
UNKNOWN	11	0.99%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Ninety-seven percent (97%) of all customer interruptions on this circuit were caused by overhead equipment malfunctions, of which 49% was attributed to one outage during a thunderstorm. A project was identified and constructed which addresses 27% of the year's customer interruptions. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	772052
Division:	CENTRAL MO
ZIP Codes(s) Served:	64624, 64637, 64671, 63114
Customers Served:	480
Customer Interruptions (CI):	969
SAIFI Value:	2.02
SAIDI Value:	178

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	779	80.39%	9
PUBLIC	13	1.34%	1
TREE	89	9.18%	4
ANIMAL	80	8.26%	4
OTHER	6	0.62%	1
UNKNOWN	2	0.21%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two outage events accounted for 63% of customers interruptions and occurred due to overhead equipment malfunctions. The first outage occurred during a snow storm. The second outage was repaired on work request KA98464. Resulting work, found during the WPC field review, will be performed on KB75317 which includes adding transformer cutouts and replacing a broken crossarm brace. An underground visual inspection was completed in 2022. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	813051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63501
Customers Served:	609
Customer Interruptions (CI):	1,119
SAIFI Value:	1.84
SAIDI Value:	46

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	489	43.70%	4
LIGHTNING	1	0.09%	1
PUBLIC	3	0.27%	1
EQUIPMENT/UG	4	0.36%	1
TREE	519	46.38%	2
ANIMAL	103	9.20%	8

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 45% of customer interruptions were due to a tree falling on primary due to snow and repairs were made at the time on OAS #240092994. Approximately 44% of customer interruptions were due to a public fire that burned a pole and electric line. Pole, primary cable, and equipment repairs were made at the time on OAS #241033500. Groundline and underground detail inspections are planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	845052
Division:	CENTRAL MO
ZIP Codes(s) Served:	65016
Customers Served:	140
Customer Interruptions (CI):	428
SAIFI Value:	3.06
SAIDI Value:	817

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	163	38.08%	6
PUBLIC	2	0.47%	1
TREE	262	61.21%	3
ANIMAL	1	0.23%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Outages on this circuit were very limited and primarily related to two events that accounted for 61% of customer interruptions. These were caused by trees falling on primary lines and breaking poles during storms. There were no reoccurring problems identified on the circuit, and no further work is required at this time. An underground detail inspection was completed in 2022, and an overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024, and a full-cycle tree trim is planned for 2027.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	851051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63559, 63544
Customers Served:	143
Customer Interruptions (CI):	251
SAIFI Value:	1.76
SAIDI Value:	913

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	69	27.49%	5
LIGHTNING	1	0.40%	1
TREE	97	38.65%	3
ANIMAL	9	3.59%	3
OTHER	2	0.80%	1
UNKNOWN	73	29.08%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 38% of customer interruptions were due to a broken tree. A tree trimming crew was sent to do tree trim work at the time. Additionally, 26% of customer interruptions are due to a overhead equipment malfunction during a winter storm on 1/9/2024. An overhead visual inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	855052
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63536, 63561
Customers Served:	291
Customer Interruptions (CI):	850
SAIFI Value:	2.92
SAIDI Value:	178

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	278	32.71%	2
LIGHTNING	1	0.12%	1
TREE	289	34.00%	4
ANIMAL	2	0.24%	2
OTHER	280	32.94%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 33% of customer interruptions were caused by thunderstorm which damaged poles. New poles were installed as a result. Approximately 33% of customer interruptions were caused by a failed insulator which was repaired at the time. Work order KB31921 is to replace cross-country with underground circuit and is planned for 2025. An underground visual inspection was completed in 2023. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	855053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63561
Customers Served:	337
Customer Interruptions (CI):	766
SAIFI Value:	2.27
SAIDI Value:	361

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	663	86.55%	9
TREE	20	2.61%	2
EMPLOYEES	1	0.13%	1
ANIMAL	82	10.70%	12

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 41% of customer interruptions were caused by failed recloser that was replaced at the time on work request KB16459. Another 41% of customer interruptions were caused by a failed insulator that was replaced at the time on OAS #241750170. An underground visual inspection was completed in 2023. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	856057
Division:	CENTRAL MO
ZIP Codes(s) Served:	63068, 63014
Customers Served:	502
Customer Interruptions (CI):	789
SAIFI Value:	1.57
SAIDI Value:	223

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	107	13.56%	17
LIGHTNING	130	16.48%	9
TREE	506	64.13%	4
ANIMAL	3	0.38%	3
OTHER	43	5.45%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Outages on this circuit were primarily related to three events. One was caused by a tree falling on a primary line resulting in a circuit outage while the other two were caused by lightning. Reliability improvements completed during 2023/2024 included replacement of approximately 1400' of brittle conductor under work order KA62342. A phase balancing study and overhead visual inspection completed as part of the WPC review; some phase imbalance was identified as well as a need for additional lightning arresters that will be addressed under work order KB75806. An underground visual inspection was completed in 2022, and an overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022, and a full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	863051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63472, 63465, 63430, 63445
Customers Served:	489
Customer Interruptions (CI):	800
SAIFI Value:	1.64
SAIDI Value:	220

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	606	75.75%	9
LIGHTNING	32	4.00%	1
PUBLIC	54	6.75%	4
EQUIPMENT/UG	11	1.38%	1
TREE	21	2.63%	1
EMPLOYEES	5	0.63%	2
ANIMAL	5	0.63%	3
OTHER	6	0.75%	4
UNKNOWN	60	7.50%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 57% of customer interruptions were caused by a failed recloser. The device was replaced with the same size recloser on work order KB16578. Work order KB24992 is planned for 2025 to reconductor, replace poles, and add a third phase along 3 mile section of Routes B&C. An underground visual inspection was completed in 2023. An overhead visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	879006
Division:	SEMO
ZIP Codes(s) Served:	63862, 63833
Customers Served:	254
Customer Interruptions (CI):	500
SAIFI Value:	1.97
SAIDI Value:	500

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	150	30.00%	2
PUBLIC	88	17.60%	1
TREE	262	52.40%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

This circuit experienced four outages in 2024 each accounted for at least 17% of customer interruptions. Two were caused by tree contact during a thunder storm and one was caused by a public vehicle. The fourth outage occured from a thunderstorm the prior evening and crews had to make repairs to an overhead switch. An underground visual inspection was completed in 2025. An overhead visual inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025. No further action is planned.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	880053
Division:	CENTRAL MO
ZIP Codes(s) Served:	65063
Customers Served:	129
Customer Interruptions (CI):	399
SAIFI Value:	3.09
SAIDI Value:	387

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
LIGHTNING	129	32.33%	2
TREE	267	66.92%	3
ANIMAL	2	0.50%	2
OTHER	1	0.25%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Outages on this circuit were primarily related to two events that occurred during storms and resulted in circuit outages. One was caused by a tree falling on a primary line, and the other was caused by lightning. A phase balancing study completed as part of the WPC review that identified some phase imbalance that will be addressed under work order KB75808. Underground detail and groundline inspections were completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022, and a full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	900051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63401
Customers Served:	45
Customer Interruptions (CI):	74
SAIFI Value:	1.64
SAIDI Value:	562

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	50	67.57%	3
TREE	24	32.43%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 95% of customer interruptions were caused by extreme weather events that caused broken poles and downed primary wire. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	909053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63383, 63390
Customers Served:	1,086
Customer Interruptions (CI):	2,617
SAIFI Value:	2.41
SAIDI Value:	171

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	173	6.61%	11
LIGHTNING	16	0.61%	3
PUBLIC	176	6.73%	2
EQUIPMENT/UG	59	2.25%	8
TREE	38	1.45%	6
ANIMAL	34	1.30%	13
OTHER	2,038	77.88%	9
UNKNOWN	83	3.17%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, 84% (four incidents) of customer interruptions were caused by either public vehicle, substation equipment, or overhead equipment. Permanent switching was completed in 2024 to move load from this circuit (909053) to circuit 909052 alleviate overloads on 909053 circuit during winter peak conditions. Work order KB70487 has been created to add a fuse switch on three-phase tap to Pendleton, MO and rebuild 1,200 feet of 1-ph 12.5kV circuit. An underground detail inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	940051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63440
Customers Served:	258
Customer Interruptions (CI):	1,089
SAIFI Value:	4.22
SAIDI Value:	1565

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	79	7.25%	6
EQUIPMENT/UG	239	21.95%	1
TREE	417	38.29%	4
ANIMAL	39	3.58%	3
OTHER	250	22.96%	2
UNKNOWN	65	5.97%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 38% of customer interruptions were caused by trees limbs falling during thunderstorms which resulted in broken poles and primary. An outage due to underground primary accounted for 22% of customer interruptions and was repaired on KB33149. Project KB21268 was completed to install new poles and primary wire. An underground visual inspection was completed in 2023. A groundline inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	949055
Division:	CENTRAL MO
ZIP Codes(s) Served:	65233, 63136
Customers Served:	506
Customer Interruptions (CI):	998
SAIFI Value:	1.97
SAIDI Value:	248

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	992	99.40%	6
TREE	1	0.10%	1
ANIMAL	5	0.50%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Ninety-nine percent (99%) of customer interruptions on this circuit were caused by three incidents relating to a single overhead malfunction occurring on a single day, April 29. Repairs took place in response to the outage. Resulting work found during the WPC field review will be performed on KB73574, which includes spot tree trimming and replacing a broken guy wire. A underground detail inspection was completed in 2022. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022. A full-cycle tree trim is planned for 2026.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	957053
Division:	CENTRAL MO
ZIP Codes(s) Served:	65043, 65101, 65110
Customers Served:	801
Customer Interruptions (CI):	1,435
SAIFI Value:	1.79
SAIDI Value:	137

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	791	55.12%	8
LIGHTNING	59	4.11%	2
PUBLIC	1	0.07%	1
EQUIPMENT/UG	1	0.07%	1
TREE	62	4.32%	2
ANIMAL	92	6.41%	6
OTHER	429	29.90%	7

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Approximately 80% of the customer interruptions on this circuit were weather related, and over 6% of customer interruptions were caused by animal issues. Reliability improvements completed during 2024 included reconductoring single phase and extending three phase on an approximately 1.3 mile section of the circuit under work order KA57257. Lightning arrester and insulator replacements, fuse upgrades, and additional animal guarding were also completed under work order KB04524. A phase balancing study completed as part of the WPC review identified some phase imbalance that will be addressed under work order KB75809. Underground detail and overhead visual inspections were completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022, and a full-cycle tree trim is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	965051
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63501, 63546
Customers Served:	703
Customer Interruptions (CI):	1,283
SAIFI Value:	1.83
SAIDI Value:	94

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,145	89.24%	12
LIGHTNING	2	0.16%	2
TREE	23	1.79%	3
ANIMAL	112	8.73%	19
OTHER	1	0.08%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, approximately 80% of customer interruptions were caused by a broken 69kV insulator at the Harrison Substation. KA23252 reliability project was completed to install FCIs. An underground visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022. A mid-cycle tree patrol is planned for 2025.



Single Year WPC Analysis and Remedial Action Report

Circuit Number:	965053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63501, 63114
Customers Served:	611
Customer Interruptions (CI):	1,142
SAIFI Value:	1.87
SAIDI Value:	338

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	572	50.09%	12
LIGHTNING	3	0.26%	1
EQUIPMENT/UG	23	2.01%	4
TREE	422	36.95%	8
EMPLOYEES	1	0.09%	1
ANIMAL	45	3.94%	2
OTHER	75	6.57%	18
UNKNOWN	1	0.09%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

In 2024, two incidents accounted for approximately 29% of customer interruptions were caused by damage to poles, primary wire and overhead equipment due to thunderstorms. Projects KA76536 and KA72887 were completed to install a switch and an intellirupter to add Distribution Automation on this circuit. Underground cable replacement project KB41425 on White Oak Trail is planned to be completed in 2026. A underground detail inspection was completed in 2022. A groundline inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2026.



APPENDIX B

Single Year WPC Analysis and Remedial Action Report

Circuit Number:	987051
Division:	CENTRAL MO
ZIP Codes(s) Served:	65255, 65231
Customers Served:	610
Customer Interruptions (CI):	1,304
SAIFI Value:	2.14
SAIDI Value:	322

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	683	52.38%	11
PUBLIC	40	3.07%	1
EQUIPMENT/UG	10	0.77%	3
TREE	493	37.81%	8
ANIMAL	55	4.22%	6
OTHER	23	1.76%	5

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

The majority of customer interruptions on this circuit were caused by overhead malfunctions with 52% and tree issues which totaled 38%, respectively. Two storm events occurring on June 3 and 14 resulted in 84% of all customer interruptions. Resulting work found during the WPC field review will be performed on KB71946 which includes adding transformer cutouts and replacing short crossarms. A groundline inspection was completed in 2024. A underground detail inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2023. A mid-cycle tree patrol is planned for 2025.



APPENDIX B

Single Year WPC Analysis and Remedial Action Report

Circuit Number:	AP1002
Division:	CENTRAL MO
ZIP Codes(s) Served:	65265
Customers Served:	1
Customer Interruptions (CI):	2
SAIFI Value:	2.00
SAIDI Value:	612

Outage Analysis

Causes	2024 Total CI	2024 % of Total CI	2024 # Incidents
LIGHTNING	1	50.00%	1
ANIMAL	1	50.00%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

Two total outages occurred on this circuit due to lightning and animal issues. Resulting work found during the WPC field review will be performed on KB70403 which includes adding a tripsaver reclosing device. A full-cycle tree trim was completed in 2024.



Circuit Number:	096002
Division:	GATEWAY
ZIP Codes(s) Served:	63134, 63112, 63140, 63132
Customers Served:	738
Customer Interruptions (CI):	1,762
SAIFI Value:	Y2022 - 2.59; Y2023 - 0.08; Y2024 - 2.39
SAIDI Value:	220

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	930	19	915	51.93%	4
LIGHTNING	0	1	42	2.38%	1
PUBLIC	42	0	50	2.84%	1
EQUIPMENT/UG	0	0	704	39.95%	1
TREE	930	24	50	2.84%	8
EMPLOYEES	2	0	1	0.06%	1
ANIMAL	21	14	0	0.00%	0
OTHER	0	1	0	0.00%	0
UNKNOWN	0	1	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) One incident accounted for 45% of the customer interruptions in 2022. This incident occurred on 7/12/2022, which was caused by an individual tree issue. A full-cycle tree trim was completed in 2023.

Corrective Actions Planned

In 2024, 40% of customer interruptions occurred as a result of an underground equipment malfunction on 1/16/2024. A lightning arrester was installed on the circuit cable to resolve this issue on OAS #240161026. Another 39.6% of customer interruptions in 2024 occurred on 3/3/2024 when a mylar balloon came into contact with the circuit's overhead conductors. The primary cable was repaired on OAS #24063074. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection is



planned for 2025. An overhead visual inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is planned for 2025. A full-cycle tree trim is planned for 2027.



Circuit Number:	123054
Division:	GATEWAY
ZIP Codes(s) Served:	63122, 63131, 63088, 63104, 63114, 63124
Customers Served:	1,179
Customer Interruptions (CI):	2,880
SAIFI Value:	Y2022 - 2.35; Y2023 - 1.43; Y2024 - 2.44
SAIDI Value:	147

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2,475	1,255	2,364	82.08%	16
PUBLIC	54	0	6	0.21%	2
EQUIPMENT/UG	1	22	178	6.18%	4
TREE	157	204	324	11.25%	13
ANIMAL	63	5	5	0.17%	2
OTHER	1	8	3	0.10%	2
UNKNOWN	7	175	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Two incidents account for 84% of the customer interruptions in 2022. The first incident was due to an equipment failure on all three reclosers. The repairs were made under DOJM work request 21MT802989. The second incident was due to an overhead conductor problem and the wire was repaired under DOJM work request 21MT803274. There are no reoccurring issues that require repair. An overhead inspection was completed in 2023. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. Also, a mid-cycle tree patrol was completed in 2023.

Corrective Actions Planned

Two incidents account for 80.2% of customer interruptions in 2024. These two incidents happened on the same device, solid blade 600 AMP switch D5792, on the same date 7/5/24 from a thunderstorm. At 2:24 AM, a solid blade switch D5792 had an over head malfunction during a storm causing 40% of customer interruptions on the circuit. Five minutes after restoration D5792



had another malfunction causing 40% of the customer interruptions on the circuit. Repairs were made on OAS #241871528. Several device and other fused tap and transformer outages caused the remaining 20% of the circuit's customer interruptions. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Circuit Number:	156009
Division:	GATEWAY
ZIP Codes(s) Served:	63134
Customers Served:	507
Customer Interruptions (CI):	998
SAIFI Value:	Y2022 - 0.13; Y2023 - 2.36; Y2024 - 1.97
SAIDI Value:	368

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	61	767	228	22.85%	5
PUBLIC	0	11	0	0.00%	0
TREE	1	414	768	76.95%	7
EMPLOYEES	3	0	0	0.00%	0
OTHER	1	1	0	0.00%	0
UNKNOWN	0	0	2	0.20%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) Sixty-four percent (64%) of customer interruptions occurred as a result of a bad connection to switch D8645 which burned up primary on 4/05/2023. Repairs were made to the switch on OAS #230951684. Around 35% of customer interruption were caused by tree related issues. There were no additional recurring problems identified on the circuit and no further work was required. A underground detail inspection was completed in 2022, and a groundline inspection was also completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

In 2024, 93% of customer interruptions were due to tree contact. Repairs were made on OAS #241663774, #241851393, #241775300, ans #243030157. There are no reoccurring problems identified on the circuit and no further work is required at this time. A mid-cycle tree patrol was completed in 2022, and a full-cycle tree trim is planned for 2025.



Circuit Number:	169053
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63038, 63040, 63005
Customers Served:	243
Customer Interruptions (CI):	477
SAIFI Value:	Y2022 - 1.74; Y2023 - 2.47; Y2024 - 1.96
SAIDI Value:	463

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	4	9	232	48.64%	4
LIGHTNING	0	78	0	0.00%	0
PUBLIC	0	259	1	0.21%	1
EQUIPMENT/UG	237	1	0	0.00%	0
TREE	160	12	233	48.85%	7
ANIMAL	36	28	11	2.31%	4
OTHER	0	223	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) In 2023, 43% of the interruptions were due to public hitting a pole several feet off a straight road. So, the poles are not in a bad location; this incident was the result of distracted driving by the public. There were no reoccurring problems identified on the circuit and no further work was required at the time. An underground visual inspection was completed in 2023. Any repair work identified as a result of this inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2022.

Corrective Actions Planned

There was one circuit outage that accounted for 26% of customer interruptions, and three device outages that each accounted for 17% of the customer interruptions in 2024. The circuit outage was due to a pole that broke located along Manchester Road near Pond Road. The pole was replaced under work order KB15974. The first device outage was due to a tree that broke and made contact with the overhead lines located along Pond Road near Rieger Road. The overhead



lines were repaired under work order KB03838. The second device outage was due to a tree that broke and made contact with the overhead lines located along Pond Road near Madisons Creek Lane. Repairs to the overhead lines were completed under work order KB07899. The third device outage was due to a tree that fell and made contact with the overhead lines located along Pond Road near Rieger Road. The overhead lines were repaired under work order KB25975. The remaining customer interruptions were largely due to overhead equipment malfunctions and tree contacts. There are no reoccurring problems identified on the circuit and no further work is required at this time. An overhead visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is planned for 2025.



Circuit Number:	208001
Division:	ARCHVIEW
ZIP Codes(s) Served:	63137, 63136, 63135
Customers Served:	711
Customer Interruptions (CI):	1,647
SAIFI Value:	Y2022 - 0.59; Y2023 - 1.90; Y2024 - 2.32
SAIDI Value:	456

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	177	356	345	20.95%	10
LIGHTNING	1	6	7	0.43%	1
PUBLIC	0	696	0	0.00%	0
TREE	164	274	1,293	78.51%	11
EMPLOYEES	0	12	2	0.12%	2
OTHER	73	5	0	0.00%	0
UNKNOWN	4	2	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) One incident accounted for 52% of the customer interruptions in 2023. Broken pole #208955 at the north east corner of Chambers and Lance causing the primary to break as well. Broken pole and primary were repaired on OAS #231433014. Circuit was inspected and no further damage was found. The second interruption caused 8% of the customer interruptions in 2023. Jumper on A phase broke causing the primary wire and connector to burn. All repairs were completed on OAS #231433141. A mid-cycle tree patrol was completed in 2021.

Corrective Actions Planned

Two incidents (not related) caused 72% of the customer interruptions on this circuit in 2024. The first incident was due to a tree falling on the primary wire breaking three spans of overhead primary wire south of switch D13015. The tree limb was removed, and new primary wire was installed. The circuit was patrolled and no further damage was found. Second incident was caused by a broken pole (3976412) that was replaced with the same size and all other equipment



was replaced. The circuit was patrolled and no further damage was found. A underground detail inspection is planned for 2025. A groundline inspection is planned for 2025. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Circuit Number:	210056
Division:	GATEWAY
ZIP Codes(s) Served:	63042, 63031
Customers Served:	287
Customer Interruptions (CI):	713
SAIFI Value:	Y2022 - 0.06; Y2023 - 1.99; Y2024 - 2.48
SAIDI Value:	298

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	12	287	586	82.19%	9
LIGHTNING	0	4	21	2.95%	2
PUBLIC	0	134	0	0.00%	0
TREE	5	113	46	6.45%	4
ANIMAL	1	19	17	2.38%	2
OTHER	1	2	0	0.00%	0
UNKNOWN	0	1	43	6.03%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) Forty-nine percent (49%) of customer interruptions were a result of an open circuit breaker on 9/13/2023. The breaker was reset on OAS #232565734. Over 23% of interruptions were a result of a public vehicle colliding with and breaking a pole on 9/13/2023. The pole was replaced on OAS #232572602. Tree related issues accounted for 20.1% of customer interruptions. An underground detail inspection was completed in 2022. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

In 2024, two incidents accounted for 77% of customer interruptions. On 3/7/2024, overhead primary cable was downed during a weather event. Repairs were made on OAS #240673230. On 5/24/2024, a span of overhead primary cable was downed during a rainstorm. Repairs were made on OAS #241454485. A full-cycle tree trim was completed in 2024.



Circuit Number:	228053
Division:	ARCHVIEW
ZIP Codes(s) Served:	63126
Customers Served:	169
Customer Interruptions (CI):	263
SAIFI Value:	Y2022 - 2.09; Y2023 - 1.70; Y2024 - 1.56
SAIDI Value:	766

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	10	61	52	19.77%	4
PUBLIC	140	0	0	0.00%	0
TREE	189	28	211	80.23%	5
ANIMAL	2	189	0	0.00%	0
OTHER	1	0	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Two incidents account for 84% of the customer interruptions in 2022. The first incident was due to a tree falling on all three phases of primary wire at the rear of 9608 Greenview Dr on a windy day on 5/8/2022 blowing fuse U22133. Repairs were made on OAS #221280135. This outage caused 43% of the circuit's customer interruptions. The second incident was due to public damage to a pole behind Crestwood Plaza, which blew fuse U22133 on 10/5/2022. Repairs were made on work request 21MT802564. This outage caused 41% of the circuit's customer interruptions. (2023) Two incidents account for 68% of the customer interruptions on 228053 in 2023. The first incident was caused by a bird that took out a span of primary at 9530 Watson Industrial Ct and led to a device outage. Repairs were made on work order KA74820. This outage caused 51% of the circuit's customer interruptions. The second incident was due to a bird that took out two spans of primary at 9539 Watson Industrial Ct and led to a device work order KA737681. Distribution automation was also added to the circuit; intellirupter switches were installed in November of 2023. A mid-cycle patrol was completed in 2023.



Corrective Actions Planned

A tree made contact with the primary at 9604 Greenview PPR and led to a device outage on 7/17/2024. Repairs were made on OAS #241986456. This outage caused 46% of the circuit's customer interruptions. A tree made contact with the primary at 9601 Greenview PPR and led to a device outage on 9/5/2024. Repairs were made on OAS #242492576. This outage caused 27% of the circuit's customer interruptions. Several device other fused tap and transformer outages caused the remaining 28% customer interruptions. A set of 200E fuses in the backbone OH (U22133) were not removed when the Intellirupters were installed in 2023, and they were not coordinating with the Intellirupters. In October, the fuses were removed and replaced with solid blades on work request KB38530 to coordinate in the future and allow the Distribution Automation to properly operate. There are no other recurring problems identified on the circuit and no further work is required at this time. An overhead visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Circuit Number:	235055
Division:	GATEWAY
ZIP Codes(s) Served:	63026, 63049, 63088, 63011, 63017, 63021
Customers Served:	1,028
Customer Interruptions (CI):	2,209
SAIFI Value:	Y2022 - 0.84; Y2023 - 2.97; Y2024 - 2.15
SAIDI Value:	598

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	490	1,560	725	32.82%	12
LIGHTNING	3	39	1	0.05%	1
PUBLIC	397	398	0	0.00%	0
EQUIPMENT/UG	93	24	10	0.45%	1
TREE	232	1,221	1,030	46.63%	5
ANIMAL	175	99	1	0.05%	1
OTHER	2	1	0	0.00%	0
UNKNOWN	56	4	442	20.01%	4

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) Three incidents accounted for 79% of the customer interruptions on the circuit in 2023. About 33% of the customer interruptions occurred on OAS #230582029. The incident was caused by a tree falling on the primary wire. Repairs were made to the overhead wire and power was restored. About 33% customer interruptions happend on OAS #231792792 when a switch malfunctioned. The switch was replaced with new switching equipment. About 11% of the customer interruptions were due to a public vehicle accident to a pole. Repairs were made to the pole that was struck by the public vehicle.

Corrective Actions Planned

Four incidents accounted for 92% of the customer interruptions in 2024. A circuit outage on OAS #242713378 caused 31% of the circuit's customer interruptions due to one phase of the primary falling down. Repairs were made on work order KB42410. A device outage on OAS



#241989354 caused 27% of the circuit's customer interruptions due to a tree falling on primary during a storm. Repair were made on work order number KB27770. A device outage on OAS #241094589 caused 18% of the circuit's customer interruptions due to intelliruptor R8055 opening during a thunderstorm. The intelliruptor was reset on OAS #241094589. A device outage on OAS #243051537 caused 16% of the circuit's customer interruptions due to a tree limb falling on primary and opening intelliruptor R3309. Repairs were made on work order KB48972. Several device and other fused tap and transformer outages caused the remaining 8% of the circuit's customer interruptions. Three distribution automation jobs were completed in 2024: KA54602, KA54583, and KA55474. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground visual inspection was completed in 2024. A ground line visual inspection was completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Circuit Number:	282056
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63017, 63005
Customers Served:	642
Customer Interruptions (CI):	1,133
SAIFI Value:	Y2022 - 1.13; Y2023 - 2.15; Y2024 - 1.77
SAIDI Value:	203

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	654	653	24	2.12%	3
PUBLIC	17	1	0	0.00%	0
EQUIPMENT/UG	37	58	464	40.95%	10
TREE	6	639	638	56.31%	1
EMPLOYEES	4	1	0	0.00%	0
ANIMAL	3	23	7	0.62%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) Two incidents accounted for 92% of customer interruptions in 2023. One incident was due to an underground equipment malfunction located near Clarkson Road and Clarkson Wilson Center. Repairs to the underground cable were completed under OAS #231433587. The second incident was due to a tree branch that contacted the overhead primary conductors located along Old Clarkson Road behind Chesterfield Ridge Circle. The tree limb was removed and repairs were completed under OAS #232381528. The remaining customer interruptions on the circuit were due to device outages caused by equipment malfunctions, tree contacts, and animals. Division Engineering planned to install two 12kV intellirupter switches located along Old Baxter Rd and South Outer 40 Road to better sectionalize the circuit and enhance reliability. An overhead visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. .

Corrective Actions Planned



There was one circuit outage and one large device outage that accounted for 69% of the customer interruptions in 2024. The circuit outage was due to a large tree that fell across Old Clarkson Road near Leiman Road and made contact with the overhead lines during a thunderstorm. The large device outage was due to an underground cable failure located along Hedgeford Drive. Repairs to the underground cable were completed under work order KB34429. The remaining smaller device outages and transformer outages were largely due to underground equipment malfunctions, and animal contacts. Two smart switches were installed on this circuit in 2024 under work order KA84457. One smart switch was installed along South Outer Forty Road at Schoettler Valley Drive. The second smart switch was installed along Old Baxter Road near Century Lake Drive. There are no reoccurring problems identified on the circuit and no further work is required at this time. A underground detail inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024. A mid-cycle tree patrol is planned in 2026.



Circuit Number:	295056
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63005, 63038, 63017
Customers Served:	607
Customer Interruptions (CI):	1,913
SAIFI Value:	Y2022 - 0.77; Y2023 - 2.20; Y2024 - 3.15
SAIDI Value:	326

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	375	617	392	20.49%	8
LIGHTNING	0	2	14	0.73%	2
PUBLIC	0	464	1,020	53.32%	5
EQUIPMENT/UG	17	20	20	1.05%	3
TREE	67	200	462	24.15%	14
ANIMAL	6	5	4	0.21%	2
OTHER	0	0	1	0.05%	1
UNKNOWN	0	6	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) In 2023, 47% of interruptions were due to failed overhead equipment, including a circuit outage for a single phase tap repair. Repairs were made after the failure. 35% of interruptions were due to the public, mostly by poles hit by distracted drivers. An overhead visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

There was one circuit outage and three device outages that accounted for 89% of the customer interruptions in 2024. The circuit outage was due to a public vehicle that hit and broke a pole located along Babler Park Drive. The pole was replaced under work order KB21573. The first device outage to note was due to a public vehicle that hit a tree causing it to fall on the overhead lines. The second device outage was due to a public vehicle that hit and broke a pole located



along Wild Horse Creek Road near Ossenfort Road. The pole was replaced under work order KB04876. The third device outage was due to a tree that broke and made contact with the overhead lines located along Wild Horse Creek Road near Babbler Forest Road. The remaining device outages were largely due to tree contacts and equipment malfunctions. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2027.



Circuit Number:	451054
Division:	SEMO
ZIP Codes(s) Served:	63664, 63623, 65566, 63625, 65439, 65565, 63622, 63650
Customers Served:	385
Customer Interruptions (CI):	694
SAIFI Value:	Y2022 - 1.99; Y2023 - 0.66; Y2024 - 1.80
SAIDI Value:	667

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	475	128	133	19.16%	15
LIGHTNING	25	8	0	0.00%	0
PUBLIC	5	0	0	0.00%	0
TREE	145	70	546	78.67%	18
ANIMAL	0	7	3	0.43%	3
OTHER	85	31	8	1.15%	1
UNKNOWN	28	4	4	0.58%	2

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) There were ten locations along the circuit identified where Trip Savers or Reclosers would benefit. Installation of the ten devices was completed in the second half of 2022. An underground visual inspection was completed in 2022 and all resulting repairs were completed in 2023 in accordance with Ameren Missouri's infrastructure inspection policy. In 2023, four additional locations were identified for Trip Savers to be installed. The installation of the additional four Trip Savers was completed in the second half of 2023. A mid-cycle tree patrol was completed in 2023.

Corrective Actions Planned

Multiple tree incidents during storm events throughout 2024 accounted for 65% of customer interruptions. There were no reoccurring problems identified outside of the tree incident issues that require further work at this time. A groundline inspection was completed in 2023 and all



identified repairs were completed in 2024 in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned in 2026.



Circuit Number:	571051
Division:	SEMO
ZIP Codes(s) Served:	63640, 63651, 63645
Customers Served:	351
Customer Interruptions (CI):	536
SAIFI Value:	Y2022 - 0.33; Y2023 - 2.04; Y2024 - 1.53
SAIDI Value:	92

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	4	429	403	75.19%	14
LIGHTNING	0	4	1	0.19%	1
EQUIPMENT/UG	0	0	5	0.93%	4
TREE	111	264	0	0.00%	0
ANIMAL	2	7	5	0.93%	4
OTHER	0	0	121	22.57%	8
UNKNOWN	0	0	1	0.19%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) Almost 38% of the customer interruptions in 2023 were due to tree related issues. An additional intellirupter was added to the circuit in late 2023 to work in conjunction with multiple existing intellirupters to provide additional automated switching and sectionalizing capabilities to eliminate or minimize the number of customers impacted by a future outage event. A groundline inspection was completed on this circuit in 2022 and all identified repairs were completed in 2023 in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

There was one incident that was caused by a broken three phase crossarm on the circuit backbone accounting for 49% of customer interruptions in 2024. This was addressed along with any other suspect crossarms in the area at the time. There were two planned outages that accounted for 37% of customer interruptions that were taken during a Smart Energy Plan relocation project UEC10686 that included replacing existing poles and single phase wire with



new poles and three phase wire for approximately 1.2 miles. There are no reoccurring problems identified on the circuit and no further work is required at this time. An underground detail inspection is planned for this circuit in 2025 and any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed on this circuit in the second half of 2024.



Circuit Number:	629052
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63343, 63330
Customers Served:	70
Customer Interruptions (CI):	119
SAIFI Value:	Y2022 - 3.94; Y2023 - 0.14; Y2024 - 1.70
SAIDI Value:	487

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	159	8	3	2.52%	3
LIGHTNING	1	1	2	1.68%	1
PUBLIC	63	0	0	0.00%	0
TREE	14	0	104	87.39%	6
ANIMAL	7	1	9	7.56%	4
OTHER	3	0	0	0.00%	0
UNKNOWN	1	0	1	0.84%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Overhead malfunctions accounted for 64% of customer interruptions in 2022. A single public vehicle event on 8/31/2022 accounted for 25% of the customer interruptions in 2022. A new work request will be created to add a new recloser on a section of cross-country overhead circuit off of Pike Co Rs 211. A mid-cycle vegetation trim was completed in 2022. An underground visual inspection was completed in 2023. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

In 2024, approximately 87% of the customer interruptions were due to trees causing broken poles, downed primary wire and blown fuses. A full-cycle tree trim is planned for 2025.



Circuit Number:	633057
Division:	SEMO
ZIP Codes(s) Served:	63701, 63755, 63703, 63109, 63134
Customers Served:	1,198
Customer Interruptions (CI):	2,905
SAIFI Value:	Y2022 - 2.06; Y2023 - 1.60; Y2024 - 2.43
SAIDI Value:	135

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	3,720	50	110	3.79%	4
LIGHTNING	0	4	0	0.00%	0
PUBLIC	113	417	1,184	40.76%	3
EQUIPMENT/UG	70	72	2	0.07%	2
TREE	212	1,257	284	9.78%	6
ANIMAL	38	59	1,185	40.79%	2
OVERLOAD	0	24	0	0.00%	0
OTHER	15	0	140	4.82%	2
UNKNOWN	973	3	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) One incident accounted for 48% of the customer interruptions in 2022. This incident occurred on 11/29/2022 when a fused cutout failed, taking out the entire circuit. The cutout and fuse were replaced. In addition, on 12/23/22, SEMO Division experienced extreme cold temperatures. This caused a failure of a substation breaker at the Mt. Auburn substation. Part of the load from Mt. Auburn substation was transferred to Glenwood substation causing overloads and subsequent cold load pickup issues. The Glenwood circuit load was then transferred to Cape Rock substation temporarily. A underground detail inspection was completed in 2022. An overhead visual inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. Lastly, a major portion of this circuit was transferred over to the Cape Rock substation in 2023-2024.



Corrective Actions Planned

A circuit outage occured when a squirrel made contact with the substation breaker. There were two incidents caused by public vehicles. We will be installing four Intellirupters on work request KB22096 to minimize outages. We are replacing the existing substatiion with a new substation across the road with switch gear. The new substation will mitigate most animal intrusions. A full cycle tree trimming was started in 2024 and will be finished in 2025 to mitigate tree outages.



Circuit Number:	636054
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63366, 63376, 63110, 63116
Customers Served:	1,428
Customer Interruptions (CI):	2,195
SAIFI Value:	Y2022 - 0.74; Y2023 - 2.10; Y2024 - 1.54
SAIDI Value:	78

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,061	0	60	2.73%	9
PUBLIC	0	0	2,110	96.13%	3
EQUIPMENT/UG	0	34	13	0.59%	1
TREE	0	2,868	2	0.09%	1
ANIMAL	0	84	0	0.00%	0
OVERLOAD	0	0	9	0.41%	1
UNKNOWN	0	0	1	0.05%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) In 2023, 96% of the customer interruptions were due to tree related issues. An underground visual inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022.

Corrective Actions Planned

In 2024, approximately 96% (two events) of customer interruptions were caused by public vehicle. Two new 12.5kV intellirupters were installed on 2024 pojects KB01932 & KB01947. One was installed at the mid-point (east side of Old Hwy 79 & three pole northwest of Highgrove Place Dr) and one at the normal open tie switch to Sondern 641-52 circuit (east side of Main St & two poles north of Hwy P). A full-cycle tree trim was completed in 2024.



Circuit Number:	685053
Division:	SEMO
ZIP Codes(s) Served:	63867, 63801, 63114, 63868
Customers Served:	491
Customer Interruptions (CI):	1,510
SAIFI Value:	Y2022 - 0.65; Y2023 - 1.95; Y2024 - 3.08
SAIDI Value:	384

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	244	688	973	64.44%	14
LIGHTNING	4	4	11	0.73%	2
EQUIPMENT/UG	8	0	6	0.40%	1
TREE	1	32	506	33.51%	4
ANIMAL	65	65	13	0.86%	8
OTHER	1	157	0	0.00%	0
UNKNOWN	0	0	1	0.07%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) There were two events that accounted for 82% of customer interruptions in 2023. The first one that accounted for 50% of customer interruptions was due to a broken pole during a thunderstorm on 02/22/23. The other event was related to a regulator that failed. Work was completed in 2023 to identify and replace two line regulators that were damaged from lightning strikes which were causing outages on DOJM workorder 2TSE136788. No further actions were planned.

Corrective Actions Planned

An incident occured due to tree contact during a thunderstorm that accounted for 31% of customer interruptions for the year. There were three other incidents due to overhead euipment failure that accounted for 62% of customer interruptions. The overhead failures were repaired on work requests KB48815 and KB56292. An underground visual inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with



Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim was completed in 2024.



Circuit Number:	719052
Division:	CENTRAL MO
ZIP Codes(s) Served:	65041, 65069
Customers Served:	413
Customer Interruptions (CI):	807
SAIFI Value:	Y2022 - 2.97; Y2023 - 1.23; Y2024 - 1.95
SAIDI Value:	575

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	583	388	145	17.97%	15
LIGHTNING	0	6	56	6.94%	3
EQUIPMENT/UG	3	1	0	0.00%	0
TREE	633	5	596	73.85%	6
ANIMAL	13	61	1	0.12%	1
OTHER	12	0	8	0.99%	2
UNKNOWN	1	49	1	0.12%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Approximately 51% of the customer interruptions were attributed to trees. Incident investigations following the April and May storms identified uprooted trees outside of Ameren easements. A cycle trim was completed in 2020. Over 46% of the customer interruptions on this circuit were due to overhead malfunctions. The reconductoring of brittle wire on the circuit was completed in 2021 and 2022. Supplemental fault current indicators (FCI's) were added to the circuit in 2021, and additional fault current indicators were planned for 2023. A coordination study and overhead visual inspection were completed as part of the worst performing circuit review. The review identified a need for various crossarm, insulator, and transformer bushing replacements as well as fused switch and recloser upgrades, additional animal guarding and spot tree trimming that was addressed under Maximo work order KA33699. An underground visual inspection will be completed in 2023. Any repair work identified as a result of the inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy.



Corrective Actions Planned

Nearly 83% of the customer interruptions on this circuit were storm and lightning related, resulting in overhead equipment and tree issues. One outage that accounted for 50% of customer interruptions was caused by trees falling on primary lines during storm, which resulted in a circuit outage. Reliability improvements completed during 2024 included lightning arrester and insulator replacements, fuse upgrades, and additional tree trimming and animal guarding under work order KB05051. A groundline inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



Circuit Number:	781001
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63531, 63537, 63543
Customers Served:	205
Customer Interruptions (CI):	629
SAIFI Value:	Y2022 - 0.00; Y2023 - 2.25; Y2024 - 3.07
SAIDI Value:	224

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1	394	610	96.98%	7
OTHER	0	24	1	0.16%	1
UNKNOWN	0	0	18	2.86%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) A tornado hit this circuit on 8/5/2023. The damage included 27 broken poles and 28 crossarms. This storm damage accounted for 332 customer interuptions which was 77% of the customer interuptions in 2023. The storm work replaced a significant portion of this circuit with new poles and crossarms making this circuit more reliable moving forward. No further projects are planned at this time. A groundline CDIS inspection was completed in 2023. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

In 2024, approximately 89% of customer interruptions were caused by broken poles and primary due to high winds and snow. Repairs including new poles and primary wire installations were completed. A underground detail inspection was completed in 2024. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2025.



Circuit Number:	860053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	64628, 64653
Customers Served:	242
Customer Interruptions (CI):	473
SAIFI Value:	Y2022 - 0.38; Y2023 - 2.24; Y2024 - 1.96
SAIDI Value:	191

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	41	263	264	55.81%	12
LIGHTNING	10	0	1	0.21%	1
TREE	37	53	76	16.07%	7
ANIMAL	0	39	127	26.85%	10
OTHER	0	97	4	0.85%	3
UNKNOWN	1	79	1	0.21%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) On 05/05/2023, a circuit outage was due to a destructive thunderstorm that resulted in 44 poles being broken in the area of Brookfield. Five of these 44 broken poles were on the circuit and accounted for 40% of the customer interuptions in 2023. KA96147 is a reliability work order planned for 2024 that will provide a circuit tie to an adjacent circuit. This project will improve operability. A groundline CDIS inspection was performed in 2023. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy.

Corrective Actions Planned

In 2024, approximately 56% of the customer interruptions were caused by broken poles and trees. KA96147 is a work order planned for 2025 that will provide a circuit tie to an adjacent circuit. This project will improve operability. Tree trimming will be bundled into the project. A full-cycle tree trim is planned for 2026.



Circuit Number:	939051
Division:	CENTRAL MO
ZIP Codes(s) Served:	65259, 65244, 63303
Customers Served:	229
Customer Interruptions (CI):	1,101
SAIFI Value:	Y2022 - 0.02; Y2023 - 2.25; Y2024 - 4.81
SAIDI Value:	674

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	0	0	227	20.62%	6
LIGHTNING	0	218	4	0.36%	1
EQUIPMENT/UG	1	0	0	0.00%	0
TREE	0	10	530	48.14%	7
ANIMAL	2	20	226	20.53%	4
OTHER	0	2	0	0.00%	0
UNKNOWN	2	261	114	10.35%	3

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2023) The majority of customer interruptions on this circuit were caused by lightning events, which totaled 43% of all customer interruptions on this circuit. An underground visual and an overhead visual inspection were completed in 2021 and 2022, respectively. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2023.

Corrective Actions Planned

The leading cause of customer interruptions on this circuit was tree contact. A storm event occurring on July 16 resulted in 24% of all customer interruptions. Previous WPC projects, KA97392 and KA97370, were performed in 2024, which included installing animal guards and replacing old porcelain arrestors and cutouts and constructing a new single phase tap to increase voltage support at the end of the circuit. Resulting work found during the WPC field review will be performed on KB75243 which includes replacing short crossarms and a porcelain cutout. An



underground detail inspection is planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A full-cycle tree trim is planned for 2026.



APPENDIX C

Division	Operating Area	Circuit	Volt	Cust	CI	CMI	SAIDI	SAIFI	2022	2023	2024	Years WPC
MERAMEC VALLEY	ELLISVILLE	115052	12KV	1723	1968	211182	123	1.14	WPC	WPC		2
CENTRAL MO	LAKESIDE	570051	12KV	1400	1575	268403	192	1.13	WPC	WPC		2
GATEWAY	BERKELEY	260053	12KV	350	317	33021	94	0.91	WPC	WPC		2
NORTHEAST MO	LOUISIANA	672053	12KV	299	148	18459	62	0.50	WPC	WPC		2
ARCHVIEW	MACKENZIE	280055	12KV	1425	712	194941	137	0.50	WPC	WPC		2
SEMO	DEXTER	817051	12KV	81	5	701	9	0.06	WPC	WPC		2
GATEWAY	BERKELEY	119004	4KV	282	10	6821	24	0.04	WPC	WPC		2
ARCHVIEW	GERALDINE	029010	4KV	570	25	3600	6	0.04	WPC	WPC		2
GATEWAY	BERKELEY	201002	4KV	9	0	0	0	0	WPC	WPC		2



APPENDIX D Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	029010
Division:	ARCHVIEW
ZIP Codes(s) Served:	63110
Customers Served:	570
Customer Interruptions (CI):	25
SAIFI Value:	Y2022 - 2.13; Y2023 - 3.88; Y2024 - 0.04
SAIDI Value:	6

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	1,075	223	25	100.00%	1
PUBLIC	0	299	0	0.00%	0
EQUIPMENT/UG	0	1,118	0	0.00%	0
TREE	127	559	0	0.00%	0
EMPLOYEES	1	0	0	0.00%	0
OTHER	3	0	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Four incidents accounted for 95% of customer interruptions. The first incident that accounted for 44% of the customer interruptions occurred when a crew replaced a cross arm. The second incident caused 10% of customer interruptions. This was due to a downed primary conductor. It was repaired on DOJM work request 21MT805032. The third incident was due to a broken tree on a primary conductor. The tree was removed, and a switch was replaced with the proper size on OAS #221513748. The last incident was due to a blown fuse. The fuse was replaced with the proper size on OAS #221864184. (2023) Three incident accounted for 95% of customer interruptions. The first incident was due to the limp on the primary and this caused the circuit outage. The tree was removed in OAS #230322106. The second interruption was due to the failed underground primary. A switch reset was done. The other interruption was due to the broken OH primary. The OH #6 Primary and span guy was repaired. This caused 20% of customers interruption. The repair was done on OAS #233140161. The last incident happened when a trash truck raised its dumpster into communication lines shaking the poles. This incident caused 30% of the interruption. One span of #6 replaced and new size of fuse was installed in the



KA82367. A full-cycle tree trim was completed in 2021, and a mid-cycle tree patrol was completed in 2023.

<u>Corrective Actions Planned</u> There was one planned outage on this circuit in 2024. A full-cycle tree trim is planned for 2026. There is no recommended action at this time.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	115052
Division:	MERAMEC VALLEY
ZIP Codes(s) Served:	63011, 63021, 63017
Customers Served:	1,723
Customer Interruptions (CI):	1,968
SAIFI Value:	Y2022 - 1.91; Y2023 - 1.99; Y2024 - 1.14
SAIDI Value:	123

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	22	1,632	154	7.83%	7
LIGHTNING	0	75	0	0.00%	0
PUBLIC	16	13	2	0.10%	2
EQUIPMENT/UG	3,017	1,477	1,488	75.61%	9
TREE	49	0	153	7.77%	6
EMPLOYEES	0	0	1	0.05%	1
ANIMAL	156	233	170	8.64%	7
UNKNOWN	3	0	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) One incident accounted for 89% of customer interruptions in 2022. The incident was due to an underground equipment malfunction located near Baxter Rd and Holloway Rd. The remaining customer interruptions were due to device and transformer outages caused by equipment malfunctions, tree contacts, and animals. A 12kV intellirupter switch was installed in 2022 near Manchester Rd and Ballpark Dr under work request 21MT721254 to sectionalize the circuit. A underground detail inspection was completed in 2022. A groundline inspection was completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2022. (2023) Two incidents accounted for 89% of customer interruptions in 2023. One incident was due to an underground equipment malfunction located near Baxter Road and Holloway Road. Repairs to the underground equipment were completed under work order KA49292. The second incident was due to an overhead equipment malfunction located near



Ivywood Drive and Hill Trail Drive. Repairs to the overhead equipment were completed under work order KA63639. The remaining customer interruptions in 2023 were due device outages and transformer outages caused by equipment malfunctions, lighting, and animals. Work order KB00132 was created to install fuse switches near Manchester Road and Ballpark Drive to better sectionalize the circuit, and work order KB00350 was created to add fuse switches to single-phase transformers connected directly to the backbone of the circuit.

Corrective Actions Planned

Four smart switches will be installed on this circuit in 2025 to reduce customer interruptions and enhance operational flexibility. The first smart switch will be installed along Holloway Road next to Holloway Park. The second smart switch will be installed along Holloway Road near Spring Oaks Drive. The third smart switch will be installed along Holloway Road near Kehrs Mill Road. These three smart switches will be installed under work order KA84378. The fourth smart switch will be installed along Baxter Road near Wildwood Parkway under work order KB27955. A full-cycle tree trim is planned for 2027.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	119004
Division:	GATEWAY
ZIP Codes(s) Served:	63132, 63114
Customers Served:	282
Customer Interruptions (CI):	10
SAIFI Value:	Y2022 - 2.05; Y2023 - 2.86; Y2024 - 0.04
SAIDI Value:	24

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	23	795	8	80.00%	1
PUBLIC	298	0	0	0.00%	0
EQUIPMENT/UG	283	0	0	0.00%	0
TREE	1	37	2	20.00%	2
EMPLOYEES	1	1	0	0.00%	0
UNKNOWN	1	1	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Two incidents accounted for 95% of customer interruptions in 2022. The first incident was caused by a car hitting a pole causing primary conductors to make contact. The second incident was due to an underground equipment malfunction. A underground detail inspection was completed in 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. (2023) 64.7% of customer interruptions were a result of two overhead malfunctions. A low-hanging primary wire was damaged on 2/27/2023 and repaired on OAS #230583225. A switch jumper burned on 10/30/2023 and was replaced on OAS #23032550.

Corrective Actions Planned

In 2024, 80% of customer interruptions occurred during a thunderstorm on 11/4/2024 where one span of primary cable came down. Repairs were made on OAS #243093560. An IntelliRupter was installed on work order KA40507 to improve circuit reliability. An overhead visual



inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol was completed in 2024. A full-cycle tree trim is planned for 2026.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	201002
Division:	GATEWAY
ZIP Codes(s) Served:	63121
Customers Served:	9
Customer Interruptions (CI):	0
SAIFI Value:	Y2022 - 5.50; Y2023 - 2.00; Y2024 - 0.00
SAIDI Value:	0

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	3	3	0	0.00%	0
TREE	40	13	0	0.00%	0
OTHER	1	0	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Approximately 90% of the customer interruptions in 2022 were the result of downed tree limbs on primary and neutral on four separate dates. The individual tree limb incidents were taken care of by vegetation management. No further work was required. (2023) Eighty-one percent (81%) of customer interruption were caused by tree related issues. There were no additional recurring problems identified on the circuit and no further work was required.

Corrective Actions Planned

No outages were reported on this circuit for 2024. There are no reoccurring problems identified on the circuit and no further work is required at this time. Underground detailed inspection and groundline inspections were completed in 2024. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is planned for 2025.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	260053
Division:	GATEWAY
ZIP Codes(s) Served:	63034
Customers Served:	350
Customer Interruptions (CI):	317
SAIFI Value:	Y2022 - 2.06; Y2023 - 2.60; Y2024 - 0.91
SAIDI Value:	94

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	75	132	11	3.47%	4
LIGHTNING	0	3	4	1.26%	1
PUBLIC	323	703	286	90.22%	1
EQUIPMENT/UG	0	8	1	0.32%	1
TREE	409	139	5	1.58%	3
EMPLOYEES	1	9	0	0.00%	0
ANIMAL	4	6	6	1.89%	3
OTHER	0	22	1	0.32%	1
UNKNOWN	5	1	3	0.95%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Two incidents accounted for 88% of customer interruptions in 2022. The first incident was due to a vehicle hitting a pole. The pole and device were repaired. After review of the pole location, there was no evidence that this is a bad location and this was an isolated incident. The second incident was due to a tree falling on primary conductor. The tree was removed and a trimming cycle was scheduled in 2023 for this circuit. Overhead visual and underground detailed inspections were completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle patrol took place in 2022. No additional corrective action was necessary. (2023) Over 68% of customer interruptions occurred as a result of a public vehicle hitting a pole on 3/17/2023. The pole and two spans of primary on both sides of the pole were replaced on OAS #230763752. Additionally, 13% of customer interruptions were caused by a span of Primary being down. The



primary was repaired on OAS #232132678. A full-cycle tree trim was planned for 2024. There were no additional recurring problems identified on the circuit and no further work was required.

Corrective Actions Planned

In 2024, 90% of customer interruptions were due to a public vehicle incident on 6/29/24. Repairs were made on OAS #241810038. There are no reoccurring problems identified on the circuit and no further work is required at this time. A full-cycle tree trim is planned for 2025.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	280055
Division:	ARCHVIEW
ZIP Codes(s) Served:	63129
Customers Served:	1,425
Customer Interruptions (CI):	712
SAIFI Value:	Y2022 - 2.12; Y2023 - 1.83; Y2024 - 0.50
SAIDI Value:	137

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	12	957	65	9.13%	4
LIGHTNING	0	0	58	8.15%	1
PUBLIC	0	1,322	307	43.12%	4
EQUIPMENT/UG	53	163	152	21.35%	6
TREE	2,651	1	114	16.01%	3
ANIMAL	58	97	15	2.11%	4
OTHER	0	0	1	0.14%	1
UNKNOWN	10	0	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Two incidents account for 95% of the customer interruptions in 2022. The first incident was due to a tree falling onto the primary conductor. The second incident was due to a tree that broke and damaged the primary conductor at a separate location during a rainstorm. An underground detailed inspection and overhead visual inspection were completed in 2022. Any repair work identified as a result of these inspections will be completed in accordance with Ameren Missouri's infrastructure inspection policy. (2023) Three incidents account for 83% of the customer interruptions. One issue was due to a public vehicle hitting and breaking a pole which was repaired on work order 21MT807752. The other two issues were due to primary lines coming down in windy conditions on two separate days downstream of two different reclosers. These were repaired on work orders KA76272 and KA83762. There were no reoccurring problems identified on this circuit in 2023 and no further work was required.



Corrective Actions Planned

A full-cycle tree trim was completed in 2024. There are no reoccurring problems identified on the circuit and no further work is required at this time.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	570051
Division:	CENTRAL MO
ZIP Codes(s) Served:	65072, 65026, 65049, 65065
Customers Served:	1,400
Customer Interruptions (CI):	1,575
SAIFI Value:	Y2022 - 1.78; Y2023 - 2.94; Y2024 - 1.13
SAIDI Value:	192

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	2,065	2,194	305	19.37%	11
LIGHTNING	0	1	1	0.06%	1
PUBLIC	85	0	0	0.00%	0
EQUIPMENT/UG	1	3	1	0.06%	1
TREE	181	1,665	1,157	73.46%	6
ANIMAL	89	103	82	5.21%	7
OTHER	3	5	2	0.13%	2
UNKNOWN	32	62	27	1.71%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Six incidents (2 overall events) accounted for 84% of the customer interruptions in 2022. The first event involved a faulted voltage regulator. The second event occurred during extreme cold temperatures in December when the restoration of broken primary and jumper was delayed due to cold load pickup. A groundline inspection was completed in 2022 and identified a number of poles, risers, grounds, and guys needing replacement along with other miscellaneous equipment. No recurring problems beyond those identified by the groundline inspection were identified on the circuit as part of the review. (2023) On 570051 in 2023, 54.4% of the customer interruptions on this circuit were due to overhead malfunctions while 41.3% were due to tree issues. The most significant event in terms of customer interruptions occurred during a thunderstorm when a tree fell outside of Ameren easements and broke a 3-phase pole. An overhead visual inspection completed as part of the WPC review identified a need for 1.5 miles of reconductoring to assist in distribution automation that will all be addressed under work order



KA94239. No reoccurring problems beyond those identified by the groundline inspection were identified on the circuit as part of the review.

Corrective Actions Planned

Although this circuit was no longer on the WPC list in 2024, there are outages to note. Nearly 73% of the customer interruptions on this circuit were due to tree issues while almost 20% were due to equipment or overhead malfunctions. One incident resulted in 58% of the customer interruptions; it occurred during a storm when a tree fell outside of Ameren easement and broke a cross arm. An overhead visual inspection completed as part of the WPC review identified a need for 2 miles of 3 phase extension to correct overloaded circuit that will all be addressed under work order KB76201. An underground visual inspection was completed in 2024. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle patrol was completed in 2022. A full-cycle tree trim is planned for 2026.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	672053
Division:	NORTHEAST MO
ZIP Codes(s) Served:	63353, 63334, 63135
Customers Served:	299
Customer Interruptions (CI):	148
SAIFI Value:	Y2022 - 2.28; Y2023 - 1.91; Y2024 - 0.50
SAIDI Value:	62

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	417	403	21	14.19%	11
LIGHTNING	8	1	1	0.68%	1
PUBLIC	210	0	82	55.41%	2
EQUIPMENT/UG	1	1	0	0.00%	0
TREE	27	138	22	14.86%	6
EMPLOYEES	0	0	5	3.38%	5
ANIMAL	1	15	15	10.14%	6
OTHER	0	1	2	1.35%	1
UNKNOWN	19	7	0	0.00%	0

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) Overhead malfunctions and the public contributed to the majority of the customer interruptions in 2022. A full-cycle tree trim was completed in 2022. (2023) Overhead malfunctions contributed 71% and tree issues accounted for 24% of the customer interruptions in 2023.

Corrective Actions Planned

In 2024, approximately 49% of customer interruptions were due to a single public vehicle incident that caused broken poles and downed primary wire. While no actions are planned for next year, we are in the process of analyzing projects in the next 4-5 years to upgrade Buffalo substation and rebuild a portion of this circuit along Hwy 54. A underground detail inspection is



planned for 2025. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. A mid-cycle tree patrol is planned for 2025.



Multi Year WPC Analysis and Remedial Action Report

Circuit Number:	817051
Division:	SEMO
ZIP Codes(s) Served:	63834, 63845, 63820
Customers Served:	81
Customer Interruptions (CI):	5
SAIFI Value:	Y2022 - 1.75; Y2023 - 2.06; Y2024 - 0.06
SAIDI Value:	9

Outage Analysis

Causes	2022 Total CI	2023 Total CI	2024 Total CI	2024 % of Total CI	2024 # Incidents
EQUIPMENT/OH	140	84	2	40.00%	2
LIGHTNING	1	2	1	20.00%	1
PUBLIC	0	79	0	0.00%	0
EQUIPMENT/UG	0	0	1	20.00%	1
ANIMAL	1	0	1	20.00%	1

Corrective actions taken or planned are noted below. These actions were developed through any combination of engineering reviews, circuit patrols, circuit inspections, and trimming. Circuit inspections and trimming are conducted on an appropriate cycle per rules 20 CSR 4240-23.020 and 20 CSR 4240.23-030 respectively.

Corrective Actions

(2022) One incident accounted for 96% of the customer interruptions in 2022. The West Catron substation experienced a lightning strike on 8/30/2022 causing an overhead substation failure. SEMO Division has created an Smart Energy Plan project (Berntie 71 34kV rebuild), which will rebuild the 34kV line with 336ACSR T2 wire and OPGW static from Lilboun to Catron to Parm to Townley in 2025. This project will also add lightning protection should prevent lightning strikes from causing outages along the length of this line and protect the overhead substation at Catron. A underground CDIS detail inspection was completed on 2022. Any repair work identified as a result of the inspection will be completed in accordance with Ameren Missouri's infrastructure inspection policy. (2023) Two events accounted for 95% of the customer interruptions in 2023. The first incident was due to three broken poles in a thunderstorm on 02/22/23 that accounted for 47% of customer interruptions. The second event was due to a public vehicle accident that brought the entire circuit offline. Additional work was planned to upgrade the Charleston 72 34kV line form Charleston to East Praire which consists of installing an OPGW static wire, replacing poles, and rec-conductoring the 12kV from Charleston to Anniston



on the SEP "CHAR-72 upgrade" on project #J1075. This will provide much needed lightning protection and offer reliable tie between Charleston and Anniston.

Corrective Actions Planned

Waiting on the approval of the Smart Energy Plan project to move forward. A mid-cycle tree patrol is planned for 2025.