

Liberty 602 S Joplin Ave Joplin, MO 64801 T 417-625-6526 Libertyutilities.com

July 1, 2025

Energy Department Missouri Public Service Commission 200 Madison Street, PO Box 360 Jefferson City, MO 65102-0360

RE: Reliability Compliance Report

The Empire District Electric Company d/b/a Liberty ("Liberty") respectfully submits its annual reliability compliance report. Pursuant to Commission Rule 20 CSR 4240-23.020(3)(C), Liberty's attached Reliability Compliance Report discusses the 2024 infrastructure activities and planned 2025 activities to maintain or improve service reliability for Liberty's electric customers. Please note that this is a working document, the planned activities are subject to change.

Respectfully submitted,

Sam McGarrah
Director, Distribution Planning and Asset Management



Table of Contents

Affidav	ritpg. 3
Section	n l:
	Introductionpg. 4
	Compliance Statementpg. 4
Section	n 2:
	2024 Distribution Inspection Plan Summarypg. 4
	2024 Transmission Inspection Plan Summarypg. 6
Section	n 3:
	Work Order Rating Summarypg. 7
	2024 Distribution Work Order Ratingpg. 8
	2024 Transmission Work Order Ratingpg. 9
Section	4:
	2024 Distribution Corrective Actionpg. 10
	2024 Transmission Corrective Actionpg. 12



AFFIDAVIT

State of Missouri ,)ss County of Jasper ,

I, Tim Wilson, having been duly sworn upon my oath, state that I am the President of Electric Operations – The Empire District Electric Company, that I am duly authorized to make this affidavit, and that the matters and things stated in the foregoing are true and correct to the best of my information, knowledge, and belief.

President of Electric Operations

Subscribed and sworn before me this 30th day of June, 2025.

Notary Public

SHERRI J. BLALOCK
Notary Public - Notary Seal
Newton County - State of Missouri
Commission Number 14969626
My Commission Expires Nov 16, 2026

X Shenni J. Blatock



Section 1:

Introduction

The system reliability department and maintenance program for The Empire District Electric Company ("Liberty" or "Company") comply with the requirements of the Missouri Public Service Commission's Electrical Corporation Infrastructure Standards, Rule 20 CSR 4240-23.020. Liberty is continually evaluating the infrastructure inspection program as the Company streamlines the inspection processes, data collection, maintenance crew collaboration, and reporting documentation.

In 2024, QUES was contracted to perform intrusive infrastructure inspections on Liberty facilities. Additionally, Liberty implemented a new risk management software in 2024 that created the opportunity to re-bid the inspection and condition assessment of our assets. The visual inspections are currently being performed for the 2024 work by Osmose Utility Services and Davey Resource Group.

Liberty utilizes internal employees to perform detail inspections on padmounted equipment, three-phase reclosers, capacitors, and regulators.

In 2024, Liberty contracted Hot/Shot Infrared Inspections, Inc. ("Hot Shot") to perform an annual aerial patrol inspection of the transmission system and an infrared inspection of equipment on the transmission system.

Liberty utilized Maximo, a work management software solution to maintain records and track the progress associated with the infrastructure inspections and corrective actions.

Compliance Statement

Liberty's 2024 calendar year reliability compliance report was prepared pursuant to and is in compliance with the Commission's Electrical Corporation Infrastructure Standards, 20 CSR 4240-23.020.

Section 2:

2024 Distribution Inspection Plan Summary

Patrol Inspections:

As outlined in the table below, Liberty completed Patrol Inspections on 0 Overhead components and 0 Streetlight components. The Company also completed 0 underground components in 2024. Please see discussion below related to Plan Deviations.

Detail Inspections:

Utilizing the services of Osmose, the Company completed 719 Detail Inspections on overhead components and 0 streetlight components. In addition, Liberty completed Detail Inspections on 0 underground components utilizing internal personnel. Please see discussion below related to Plan Deviations.



Intrusive Inspections:

Utilizing the services of Quanta, the Company completed 8,780 intrusive pole inspections in 2024. 8,281 intrusive pole inspections were completed in the first quarter of 2025.

Plan Deviations:

Liberty implemented a new risk management software in 2024 that created the opportunity to re-bid the inspection and condition assessment of system assets. The intrusive inspections, performed by QUES, have been completed at the time of this filing. The visual inspections are being performed for the 2024 work by Osmose Utility Services and Davey Resource Group. At the time of this filing inspectors have completed 73% of the 2024 inspections. The remaining inspection Plan Deviations are scheduled to be completed prior to the end of year 2025.

	2024 Distribution Inspection Plan Summary									
Inspection Type	Facility Type	Components	Inspections Planned for 2024	Inspections Completed During 2024	Inspections Not Completed in 2024					
	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	36,149	0	36,149					
Patrol	Streetlight System	Structures	323	0	323					
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	3,442	0	3,442					
	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	30,877	719	30,158					
Detail	Streetlight System	Structures	166	0	166					
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	3,602	0	3,602					
Intrusive	Wood Poles	Poles	17,061	8,780	8,281					



2024 Transmission Inspection Plan Summary

Patrol Inspections:

Liberty completed an aerial Patrol Inspection on 15,553 overhead components using the services of Hot/Shot Infrared Inspections.

Detail Inspections:

The Company completed 0 Detail Inspections on overhead components. Please see discussion on Plan Deviations below.

Intrusive Inspections:

The Company completed 0 Intrusive Inspections. Please see discussion on Plan Deviations below.

Plan Deviations:

All transmission inspections scheduled for 2024 are scheduled to be completed by year end 2025.

	2024 Transmission Inspection Plan Summary											
Inspection Type Facility Type		Components	Inspections Planned for 2024	Inspections Completed During 2024	Inspections Not Completed in 2024							
Patrol	Overhead Structures & Equipment	Poles	15,553	15,553	0							
Detail	Overhead Structures & Equipment	Poles, Switches	4,360	0	4,360							
Intrusive	Overhead Structures & Equipment	Poles	1,153	0	1,153							



Section 3:

Work Order Rating Summary

Liberty has developed a priority rating system to classify corrective actions and provide appropriate remediation schedules. The priority rating system allows Liberty to balance its resources to remediate corrective actions in a timely and economical manner while improving the service reliability to its customers. Only items identified during infrastructure inspections will be rated using this system. A listing of the priority ratings description and corresponding scheduling period are detailed in the table below.

Corrective Action Scheduling Period	Description
1 Day	Emergency/Safety/Load Limiting/Customer Outage
12 Months	Time Critical/Seasonal
24 Months	Routine/Non-Critical
36 Months	Routine/Non-Critical



2024 Distribution Work Order Rating

	2024 Distribution Work Order Rating Summary											
Inspection Type	Facility Type	Components	1 Day	12 Month	24 Month	36 Month						
Patrol	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	0	0	0	0						
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	0	0	1	7						
	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	0	0	0	0						
Detail	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	14	5	18	362						
Intrusive	Wood Poles & Equipment	Poles	9	387	170	756						

	2024 Distribution Work Order Rating Summary - Percentage										
Inspection Type	Facility Type	Components	1 Day	12 Month	24 Month	36 Month					
Patrol	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	0%	0%	0%	0%					
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches,	0%	0%	13%	88%					
Detail	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	0%	0%	0%	0%					
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches,	4%	1%	5%	91%					
Intrusive	Wood Poles & Equipment	Poles	1%	29%	13%	57%					



2024 Transmission Work Order Rating

	2024 Transmission Work Order Rating Summary									
Inspection Type	Facility Type	Components	1 Day	12 Month	24 Month	36 Month				
Patrol	Overhead Structures & Equipment	Poles	0	0	0	0				
Detail	Overhead Structures & Equipment	Poles & Switches	0	0	0	0				
Intrusive	Overhead Structures & Equipment	Poles	0	15	2	32				

2024 Transmission Work Order Rating Summary – Percentage										
Inspection Type	Facility Type	Components	1 Day	12 Month	24 Month	36 Month				
Patrol	Overhead Structures & Equipment	Poles	0%	0%	0%	0%				
Detail	Overhead Structures & Equipment	Poles & Switches	0%	0%	0%	0%				
Intrusive	Overhead Structures & Equipment	Poles	0%	31%	4%	65%				



Section 4:

2024 Distribution Corrective Action

Liberty completed 2,612 distribution corrective actions of the 3,548 that were planned in 2024. Planned corrective actions scheduled in 2024 are based on the priority rating system due dates. As of the date of this report, another 193 corrective actions have been completed in 2025.

	2024 Distribution Corrective Action Summary										
Inspection Type	Facility Type	Components	Corrective Action Planned in 2024	Corrective Action Completed in 2024	Corrective Action Incomplete in 2024	Corrective Action Completed in 2025					
Patrol	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	1,506	1,076	430	17					
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	2	2	-	-					
Datail	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	739	386	353	142					
Detail	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	27	20	7	-					
Intrusive	Wood Poles & Equipment	Poles	1,274	1,128	146	34					
Total			3,548	2,612	936	193					



	2024 Distribution Corrective Action Summary - Percentage									
Inspection Type	Facility Type	Components	Corrective Action Planned in 2024	Corrective Action Completed in 2024	Corrective Action Incomplete in 2024	Corrective Action Completed in 2025				
Patrol	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	1,506	71%	29%	1%				
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	2	100%	0%	0%				
Detail	Overhead Circuits, Structures, & Equipment	Poles, Transformers, Capacitors, Regulators, Reclosers, Switches	739	52%	48%	19%				
	Underground Structures & Equipment	Sectionalizing Cabinets, Vaults, Transformers, Switches	27	74%	26%	0%				
Intrusive	Wood Poles & Equipment	Poles	1,274	89%	11%	3%				

Distribution Plan Deviations:

The Company completed the majority of scheduled corrective actions in 2024. A minimal portion of the scheduled work was delayed due to implementation of new EAP software, access availability and outage scheduling. All remaining 2024 scheduled corrective actions are scheduled to be completed by end of year, 2025.



2024 Transmission Corrective Action

Liberty completed 92 transmission corrective actions of the 255 that were planned in 2024. As of the date of this report, another 29 corrective actions were completed in 2025. Please refer to the Transmission Plan Deviation discussion below.

	2024 Transmission Corrective Action Summary										
Inspection Type	Facility Type	Components	Corrective Action Planned in 2024	Corrective Action Completed in 2024	Corrective Action Incomplete in 2024	Corrective Action Completed in 2025					
Patrol	Overhead Structures & Equipment	Poles	33	3	30	-					
Detail	Overhead Structures & Equipment	Poles & Switches	147	67	80	17					
Intrusive	Overhead Structures & Equipment	Poles	74	22	53	12					
Total			255	92	163	29					

	2024 Transmission Corrective Action Summary - Percentage										
Inspection Type	Facility Type	Components	Corrective Action Planned in 2024	Corrective Action Completed in 2024	Corrective Action Incomplete in 2024	Corrective Action Completed in 2025					
Patrol	Overhead Structures & Equipment	Poles	33	9%	91%	0%					
Detail	Overhead Structures & Equipment	Poles & Switches	147	46%	54%	12%					
Intrusive	Overhead Structures & Equipment	Poles	75	29%	71%	16%					



Transmission Plan Deviations:

The Company completed a portion of scheduled corrective actions in 2024. The remaining scheduled work was delayed due to implementation of new EAP software, access availability and outage scheduling. All remaining 2024 scheduled corrective actions are scheduled to be completed by end of year, 2025.