

KCP&L
2017 Annual Infrastructure Compliance Report
Pursuant to 4 CSR 240-23.020

KCP&L Greater Missouri Operations Company
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Infrastructure Inspection and Maintenance Program

June 29, 2018

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Introduction

Kansas City Power & Light Company (“KCP&L”) and KCP&L Greater Missouri Operations Company (“GMO”) (collectively, “Companies”), submit their 2017 Annual Infrastructure Compliance Reports as required under the State of Missouri’s *Electrical Corporation Infrastructure Standards*, 4 CSR 240-23.020 (“MoIR”). This report covers the period January 1, 2017, through December 31, 2017, incorporating by reference KCP&L and GMO’s infrastructure compliance plans filed July 1, 2008.

Distribution System Summary

KCP&L and GMO are aligned with the Overhead and Underground Infrastructure Inspection schedule set forth in the MoIR. Immediate corrective action is taken when conditions are identified as critical to safety and/or service reliability. Whenever possible, corrective work on non-critical conditions is bundled with future reliability work targeting underperforming feeders and laterals.

In 2017, Intrusive Wood Pole, Overhead Circuit Structure Patrol, Detail & Patrol of Underground Structure and Equipment, and Pad-mounted Equipment Patrol inspections were scheduled in both the KCP&L and GMO areas. Inspections are on schedule to be completed by the end of the cycle.

KCP&L Area Inspections

Overhead Patrols, Pad-mount Patrols, Manhole Patrols, Manhole Detailed, and Overhead Detailed & Wood Pole Intrusive inspections were scheduled for KCP&L's service area in 2017.

KCP&L is currently on schedule for all inspection types with the first 12-year cycle spanning from 2009-2020. The current schedule for inspections is as follows:

- 1) Overhead Patrols (Cycle 2 Rural 2015-2020) (Cycle 3 Urban 2017-2020)
- 2) Pad-mount Patrols (Cycle 3, 2015-2018)
- 3) Manhole Patrols (Cycle 3, 2015-2018)
- 4) Pad-mount Detailed (Cycle 3, 2019-2022)
- 5) Manhole Detailed (Cycle 3, 2015-2022)
- 6) Overhead Detailed and Wood Pole Intrusive (Cycle 1, 2009-2020)

Table 1: KCP&L Inspection Corrective Action Inspections							
KCP&L Distribution				Completed Through December 2017			
System Class	Inspection Type	Facility Type	Units	Inspections Scheduled (Annual Plan)	Inspections Completed	Inspections Completed Prior to 2017 (Ahead of Cycle Plan)	Inspections Pending Outside of Plan
Distribution	Patrol	Overhead Circuits Structures & Equipment ¹	Structures	32,655	32,655	0	0
		Pad-mounted Equipment	Equipment Locations	5,743	5,743	0	0
		Underground Structures and Equipment	Structure Locations	710	710	0	0
	Detail	Overhead Circuits Structures & Equipment	Structures	11,398	11,398	0	0
		Pad-mounted Equipment	Equipment Locations	0	0	0	0
		Underground Structures and Equipment	Structure Locations	710	710	0	0
	Intrusive	Wood Poles	Poles	11,398	11,398	0	0

¹ Inclusive of conductors, transformers, reclosers, regulators, capacitors, switching/protective devices as required under the MoIR.

GMO Area Inspections

Overhead Patrols, Pad-mount Patrols, Manhole Patrols, and Overhead Detailed & Wood Pole Intrusive inspections were scheduled for GMO's service area in 2017.

GMO is currently on schedule for all inspection types with the first 12-year cycle spanning from 2009-2020. The current schedule for inspections is as follows:

- 1) Overhead Patrols (Cycle 2 Rural 2015-2020) (Cycle 3 Urban 2017-2020)
- 2) Pad-mount Patrols (Cycle 3, 2015-2018)
- 3) Manhole Patrols (Cycle 3, 2015-2018)
- 4) Pad-mount Detailed (Cycle 3, 2019-2022)
- 5) Manhole Detailed (Cycle 1, 2015-2022)
- 6) Overhead Detailed and Wood Pole Intrusive (Cycle 1, 2009-2020)

GMO Distribution				Completed Through December 2017			
System Class	Inspection Type	Facility Type	Units	Inspections Scheduled (Annual Plan)	Inspections Completed	Inspections Completed Prior to 2017 (Ahead of Cycle Plan)	Inspections Pending Outside of Plan
Distribution	Patrol	Overhead Circuits, Structures, Equipment and Street Lights ²	Structures	41,457	41,457	0	0
		Pad-Mounted Equipment	Pads	13,808	13,808	0	0
		Underground Structures and Equipment	Structures	0	0	0	0
	Detailed	Overhead Structures, Circuits, Equipment and Street Lights	Structures	56,016	56,016	0	0
		Pad-mount Equipment	Pads	0	0	0	0
		Underground Structures and Equipment	Structures	0	0	0	0
	Intrusive	Wood Poles	Poles	56,016	56,016	0	0

² Inclusive of conductors, transformers, reclosers, regulators, capacitors, switching/protective devices as required under the MoIR.

Table 6: GMO Transmission Corrective Action and Equipment Conditions							
GMO Transmission				Completed Through December 2017			
System Class	Inspection Type	Facility Type	Units	Inspections Planned for 2017	Inspections Completed During 2017	Inspections Completed Prior to 2017 (Ahead of Plan)	Inspections Pending in 2017 Outside of Plan
Transmission	Aerial and Ground Patrol	Overhead Circuits Structures & Equipment	Structures	14,827	14,827	0	0
		Underground Structures and Equipment	Structures	1	1	0	0
	Detail and Intrusive	Wood/Steel Poles	Poles	2,236	2,400	0	0

Table 7: KCP&L Transmission Equipment Condition Rating Summary						
System Class	Inspection Type	Facility Type	Component	Repairs Completed Within 12-Months	Schedule for Repair Within 12 to 36 Months	Corrective Action Not Required
Transmission	Aerial and Ground Patrol	Overhead	Poles, Switches	19 (0.26%)	30 (0.41%)	7267 (99.33%)
		Underground Structures	Manholes	0 (0.00%)	0 (0.00%)	30 (100%)
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	1 (0.01%)	63 (3.2%)	1,879 (96.79%)

Table 8: GMO Transmission Equipment Condition Rating Summary						
System Class	Inspection Type	Facility Type	Component	Repairs Completed Within 12-Months	Schedule for Repair Within 12 to 36 Months	Corrective Action Not Required
Transmission	Aerial and Ground Patrol	Overhead	Poles, Switches.	24 (0.16%)	43 (0.29%)	14,760 (99.55%)
		Underground Structures	Manholes.	0 (0.00%)	0 (0.00%)	1 (100%)
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	0 (0.00%)	28 (1.17%)	2372 (98.83%)

Table 9: KCP&L Transmission Corrective Action (CA) Summary							
System Class	Inspection Type	Facility Type	Component	CA Planned in 2017	CA Completed in 2017	CA Planned in 2018	CA Planned after 2018
Transmission	Aerial and Ground Patrol	Overhead Structures & Equipment	Poles, Switches	19	136	27	18
	Aerial and Ground Patrol	Underground Structures and Equipment	Manhole	0	0	0	0
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	3	10	15	40

Table 10: GMO Transmission Corrective Action (CA) Summary							
System Class	Inspection Type	Facility Type	Component	CA Planned in 2017	CA Completed in 2017	CA Planned in 2018	CA Planned after 2018
Transmission	Aerial and Ground Patrol	Overhead Structures & Equipment	Poles, Switches	24	119	55	44
	Aerial and Ground Patrol	Underground Structures and Equipment	Manhole	0	0	0	0
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	3	22	12	14

VERIFICATION

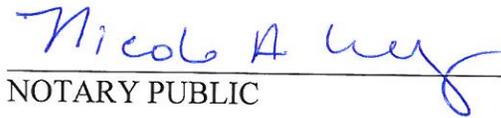
STATE OF MISSOURI)
) ss.
COUNTY OF JACKSON)

I, Kevin Noblet, being duly affirmed according to law, depose and hereby state that I am authorized to make this affidavit on behalf of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company, as Vice President, and that the facts above set forth are true and correct to the best of my knowledge, information and belief.



Kevin Noblet
Kansas City Power & Light Company

Subscribed and affirmed before me this 26th day of June, 2018.


NOTARY PUBLIC

My Commission Expires:

Feb. 4 2019

