

**KCP&L
2015 Annual Infrastructure Compliance Report
Pursuant to 4 CSR 240-23.020**

**KCP&L Greater Missouri Operations Company
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Pursuant to 4 CSR 240-23.020**

Infrastructure Inspection and Maintenance Program

July 1, 2016

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Introduction

Kansas City Power & Light Company (“KCP&L”) and KCP&L Greater Missouri Operations Company (“GMO”) (collectively, “Companies”), submit their 2015 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, 2015, through December 31, 2015, 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.

All KCP&L and GMO streetlights (including wood poles) were inspected in 2015 with the Overhead Inspection Program and corrective action was completed as required. This work satisfied the Patrol and Detailed Street Light Inspection requirements.

Additionally in 2015, Intrusive Wood Pole inspections were not scheduled in the KCP&L area because the inspection cycle was moved ahead of schedule in 2012. GMO Intrusive Wood Pole inspections were planned in 2015, and were delayed until 2016. These inspections are expected to be completed by the end of the cycle.

KCP&L Area Inspections

KCP&L began the second 4-year patrol cycle in 2013 as set forth in the MoIR. KCP&L's second 8-year detailed inspection cycle for Below Grade Manholes and Vaults began in 2015 and will continue until the end of the 8-year cycle set forth in the MoIR. There were no Intrusive Wood Pole inspections scheduled for KCP&L's service areas in 2015.

<u>Table 1: KCP&L Inspection Corrective Action Inspections</u>							
KCP&L Distribution				Completed Through December 2015			
System Class	Inspection Type	Facility Type	Units	Inspections Scheduled (Annual Plan)	Inspections Completed	Inspections Completed Prior to 2015 (Ahead of Cycle Plan)	Inspections Pending Outside of Plan
Distribution	Patrol	Overhead Circuits Structures & Equipment ¹	Structures	19,032	19,032	0	0
		Pad-mounted Equipment	Equipment Locations	8	8	0	0
		Underground Structures and Equipment	Structure Locations	0	0	0	0
	Detail	Overhead Circuits Structures & Equipment	Structures	1,506	1,506	0	0
		Pad-mounted Equipment	Equipment Locations	0	0	0	0
		Underground Structures and Equipment	Structure Locations	2	2	0	0
	Intrusive	Wood Poles	Poles	0	203	0	0

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

GMO Area Inspections

All Overhead Patrol and Overhead Detailed Equipment inspections in the GMO service area were completed ahead of the required cycle. In 2014, GMO started the second 4-year patrol cycle. The 8-year detailed cycle requirements for the Below Grade Manholes and Vault Inspections were not started in 2015; a schedule change was put in place to begin in 2016. Future inspections will be aligned with the MoIR schedule. There were intrusive wood pole inspections planned for GMO areas in 2015. The 2015 Intrusive Wood Pole inspections were delayed until 2016.

Table 2: GMO Inspection Corrective Action Inspections

GMO Distribution					Completed Through December 2015		
System Class	Inspection Type	Facility Type	Units	Inspections Scheduled (Annual Plan)	Inspections Completed	Inspections Completed Prior to 2015 (Ahead of Cycle Plan)	Inspections Pending Outside of Plan
Distribution	Patrol	Overhead Circuits, Structures, Equipment and Street Lights ²	Structures	61,554	61,554	0	0
		Pad Mounted Equipment	Pads	139	139	0	0
		Underground Structures and Equipment	Structures	0	0	0	0
	Detailed	Overhead Structures, Circuits, Equipment and Street Lights	Structures	5,334	5,334	0	0
		Padmount Equipment	Pads	75	75	0	0
		Underground Structures and Equipment	Structures	0	0	0	0
	Intrusive	Wood Poles	Poles	0	178	0	0

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

Distribution Equipment Rating Summary

Table 3: Combined Distribution Equipment Rating Summary

System Class	Inspection Type	Facility Type	Units	Immediate Repair or Next Day	Bundled for Future Work	Corrective Action not Required
Distribution	Detail	Overhead Circuits Structures & Equipment	Structures	0 (0.00%)	73,693 (32.02%)	156,428 (67.98%)
		Pad-mounted Equipment	Equipment Locations	0 (0.00%)	14,134 (43.94%)	18,035 (56.06%)
		Underground Structures and Equipment	Structure Locations	0 (0.00%)	128 (98.46%)	2 (1.54%)
	Intrusive	Wood Poles	Poles	0 (0.00%)	179 (100.00%)	(0.00%)

Distribution Corrective Action Summary

The number of corrective actions completed on Worst Performing Circuits and Lateral Improvements are inclusive of corrective efforts such as: infrared inspections of splices, ultrasound detection of insulators, ground wire repairs, varmint guard, riser conduit repairs, arrester replacements, and, additionally, critical pole and cross arm replacements.

Table 4: Combined Distribution Corrective Action Summary

System Class	Inspection Type	Facility Type	Component	CA Scheduled in 2015	CA Completed in 2015	CA Planned in 2016	CA Planned after 2016 ³
Distribution	Patrol and Detailed Patrol	Overhead Circuits Structures & Equipment, Street Lights	Structures	6,000	7,354	6,000	7,000
		Pad-mounted Equipment	Pads	350	240 ⁴	250	400
		Underground Structures and Equipment	Structures	40	32 ⁵	30	85
	Intrusive	Wood Poles	Poles	300	440	300	750

³ CA Planned after 2016 reflects the number of Corrective Actions planned on an annual basis through 2020 and variances from 2014.

⁴ Work not completed due to scheduling issues is expected to be completed by the end of the cycle.

⁵ Work not completed due to scheduling issues is expected to be completed by the end of the cycle.

Transmission System Summary

All KCP&L and GMO transmission lines are inspected annually by aerial and ground patrol, as was the case in the spring of 2015. This schedule is more rigorous than that required under the MoIR.

There were 388 combined corrective actions, based on aerial and ground patrols, completed in 2015.

There are 60 combined corrective actions scheduled for 2016 completion.

There were no detailed and intrusive pole inspections scheduled in 2015 for the KCP&L and GMO service areas, due to being ahead of schedule of the required MoIR inspection cycle. There were 14 poles in need of corrective action scheduled for completion in 2015. A total of 45 corrective actions were completed, which included 31 poles originally scheduled for after 2015. There are 7 poles scheduled for completion in 2016.

Table 5: KCP&L Transmission Corrective Action and Equipment Conditions							
KCP&L Transmission				Completed Through December 2015			
System Class	Inspection Type	Facility Type	Units	Inspections Planned for 2015	Inspections Completed During 2015	Inspections Completed Prior to 2015 (Ahead of Plan)	Inspections Pending in 2015 Outside of Plan
Transmission	Aerial and Ground Patrol	Overhead Circuits Structures & Equipment	Structures	7,316	7,316	0	0
		Underground Structures and Equipment	Structures	34	34	0	0
	Detail and Intrusive	Wood/Steel Poles	Poles	0	0	0	0

Table 6: GMO Transmission Corrective Action and Equipment Conditions							
GMO Transmission				Completed Through December 2015			
System Class	Inspection Type	Facility Type	Units	Inspections Planned for 2015	Inspections Completed During 2015	Inspections Completed Prior to 2015 (Ahead of Plan)	Inspections Pending in 2015 Outside of Plan
Transmission	Aerial and Ground Patrol	Overhead Circuits Structures & Equipment	Structures	14,801	14,801	0	0
		Underground Structures and Equipment	Structures	1	1	0	0
	Detail and Intrusive	Wood/Steel Poles	Poles	0	0	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	2 (0.03%)	28 (0.38%)	7,286 (99.59%)
		Underground Structures	Manholes	0 (0.00%)	0 (0.00%)	34 (100%)
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	0 (0.00%)	0 (0.00%)	0 (0.00%)

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.	33 (0.22%)	63 (0.43%)	14,705 (99.35%)
		Underground Structures	Manholes.	0 (0.00%)	0 (0.00%)	1 (100%)
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	0 (0.00%)	0 (0.00%)	0 (0.00%)

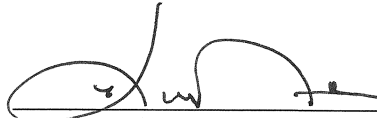
Table 9: KCP&L Transmission Corrective Action (CA) Summary							
System Class	Inspection Type	Facility Type	Component	CA Planned in 2015	CA Completed in 2015	CA Planned in 2016	CA Planned after 2016
Transmission	Aerial and Ground Patrol	Overhead Structures & Equipment	Poles, Switches	2	110	20	181
	Aerial and Ground Patrol	Underground Structures and Equipment	Manhole	0	0	0	0
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	11	28	4	0

Table 10: GMO Transmission Corrective Action (CA) Summary							
System Class	Inspection Type	Facility Type	Component	CA Planned in 2015	CA Completed in 2015	CA Planned in 2016	CA Planned after 2016
Transmission	Aerial and Ground Patrol	Overhead Structures & Equipment	Poles, Switches	33	278	40	433
	Aerial and Ground Patrol	Underground Structures and Equipment	Manhole	0	0	0	0
	Detail and Intrusive	Poles and Structures - Wood/Steel	Poles	3	17	3	0

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 20th day of June, 2016.



NOTARY PUBLIC

My Commission Expires:

Oct. 6. 2017

