



**KCP&L Greater Missouri Operations Company
2013 Reliability Performance Report**

Annual reporting completed pursuant to 4 CSR 240-23.010

April 30, 2014

Table of Contents

4 CSR 240.23.010 (1), (2), (3), (4), (5) – Reliability Statistics 2013.....	2
Table 1: KCP&L Greater Missouri Operations Company Reliability Indices	2
4 CSR 240-23.010 (6), (7) – Highest 5% SAIFI Circuits Assessment.....	2
Table 2: Highest 5% SAIFI Circuit.....	3
4 CSR 240-23.010 (8) - Multi Year Worst Performing Circuit Reporting.....	4
Table 3: Multi-Year Worst Performing Circuit Report.....	4

4 CSR 240.23.010 (1), (2), (3), (4), (5) – Reliability Statistics 2013

Table 1: KCP&L Greater Missouri Operations Co.
Reliability Indices

2013		MPS	SJLP	GMO
Total Customers (Meter Counts)		244,859	64,078	308,938
Adjusted	SAIFI	1.023	1.309	1.082
	SAIDI	102.04	106.09	102.88
	CAIDI	99.75	81.05	95.10
	CAIFI	1.13	1.09	1.12
Unadjusted	SAIFI	1.454	1.666	1.499
	SAIDI	215.40	233.50	219.18
	CAIDI	148.18	140.16	146.25
	CAIFI	1.16	1.21	1.17

Event days excluded from the KCP&L-GMO adjusted 2013 statistics:
February 26-27, 2013, May 19-20, 2013, June 15-16, 2013,
June 27-28 2013, September 1, 2013, and September 19-20, 2013

4 CSR 240-23.010 (6), (7) – Highest 5% SAIFI Circuits Assessment

Table 2 lists circuits identified as having the highest 5% of adjusted SAIFI statistics in 2013 as set forth in 4 CSR 240.23.010 (6). Patrols and repairs scheduled were performed in the 1st Quarter 2014. For circuits where an analysis is being completed, a systematic patrol plan is developed based on identified outage causes and, when and where feasible, repairs made during the initial patrol. Tree patrols were performed and spot trimming completed. Other maintenance, modifications or upgrades not completed during the initial patrol were scheduled for completion by the 2nd Quarter 2014. Additionally, engineering was to determine root cause analysis on recurring problems and issue corrective action jobs to be completed by the end of 2nd Quarter of 2014.

Table 2: Highest 5% SAIFI Circuits

<u>Center</u>	<u>Circuit ID</u>	<u>Substation ID</u>	<u>Action Plan</u>	<u>SAIFI</u>	<u>SAIDI</u>
Henrietta	33322	Richmond (333)	Sagging Conductor, Broken Crossarm, Lightning; Patrolled and made repairs	7.7	912.54
Warrensburg	23712	Elm (237)	Sagging Conductor, Lightning; Patrolled and made repairs	3.47	887.42
Warrensburg	37321	Warrensburg East (373)	Switches, trees, varmints, sagging conductors; Patrolled and made repairs	3.44	377.6
Warrensburg	36011	Strasburg (360)	Lightning, sagging conductor; Patrolled and made repairs	3.41	576.09
Warrensburg	22812	Concordia 69/34 (228)	Lightning, sagging conductor, varmints; Patrolled and made repairs	2.91	328.17
Belton	33113	Richard Gebaur (331)	Lightning; Patrolled and made repairs	2.82	254.08
Platte City	31911	Platte City (319)	Lightning, Insulators, Trees; Patrolled and made repairs\Tree trimming completed in 2013	2.68	281.4
Trenton	36521	Trenton (365)	Sagging conductors; Patrolled and made repairs	2.39	251.5
St Joseph	40121	Kellogg (401)	Lightning; Patrolled and made repairs	2.37	149.65
Henrietta	31311	Orrick (313)	Sagging conductor and Pole; Patrolled and made repairs\ Intrusive inspection all poles\trees trimmed in 2013	2.26	889.34
Platte City	23822	Ferrelview (238)	Lightning: Patrolled and made repairs	2.19	208.49
Warrensburg	27511	Knob Noster (275)	Sagging Conductors, Broken crossarm, and Trees; Patrolled and made repairs\Schedule tree trimming 2014	2.14	395.26
Warrensburg	26312	Holden (263)	Lightning, Insulators ,sagging conductors; Patrolled and made repairs	2.13	218.98

Warrensburg	36012	Strasburg (360)	Sagging conductor; Patrolled and made repairs	2.05	347.82
Blue Springs	21321	Blue Springs (West)	Trees, sagging conductor- Patrolled and made repairs	2.03	277.03

Event days excluded from the KCP&L-GMO adjusted 2013 statistics: February 26-27, 2013, May 19-20, 2013, June 15-16, 2013, June 27-28 2013, September 1, 2013, and September 19-20, 2013

4 CSR 240-23.010 (8) – Multi-Year Worst Performing Circuit Reporting

The referenced rule requires the plan and schedule to lower SAIFI metrics on circuits that are listed on the highest 5% SAIFI list for two out of three of the preceding years. Circuit 31911 has met this reporting requirement. Table 3 reflects the work plan and schedule to lower the SAIFI metric for this circuit. The work plan was 100% completed mid-year 2012. We conducted additional patrols and root cause analysis at the end of 2013. The entire tree trimming schedule was completed in the 4th quarter of 2013

Table 3: Multi-Year Worst Performing Circuit Report

Year	Centers	Circuit ID	Substations	Action Plan	SAIFI	SAIDI
2010 2011 2012 2013	Northland	31911	Platte City	Planned Work and Schedules for Circuits 31911 – Work was completed in 2011. Additional work was performed on this circuit in 2012 and 2013. Based on the timing (2 nd half of 2013) of work shown in Table 2, these past efforts are expected to mitigate historical performance issues. The intent is to monitor and verify improvement in circuit performance, and revisit if problems should reoccur or if new problems should arise.	2.94	278.67