



**Kansas City Power & Light Company
2011 Reliability Performance Report**

Annual reporting completed pursuant to 4 CSR 240-23.010 *et seq.*

April 30, 2012

Table of Contents

4 CSR 240.23.010 (1), (2), (3), (4), (5) – RELIABILITY STATISTICS 2011.....	2
Table 1: KCP&L Reliability Indices.....	2
4 CSR 240-23.010 (6), (7) – HIGHEST 5% SAIFI CIRCUITS ASSESSMENT	2
Table 2: Highest 5% SAIFI Circuits.....	3
4 CSR 240-23.10 (8)-Multi-Year Worst Performing Circuit Reporting.....	3

4 CSR 240.23.010 (1), (2), (3), (4), (5) – RELIABILITY STATISTICS 2011

Table 1: KCP&L Reliability Indices

2011		
Total Customers (Meter Counts)		272,581
Adjusted	SAIFI	0.76
	SAIDI	85.0
	CAIDI	111.8
	CAIFI	1.3
Unadjusted	SAIFI	1.4
	SAIDI	468.5
	CAIDI	334.6
	CAIFI	1.9

Event days excluded from the KCP&L adjusted 2011 statistics:
April 3-4; May 25; June 18-21, 25-27; July 12-13; August 3, 7-8, 18-22, 2011

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 2011, as set forth in 4 CSR 240.23.010 (6). Patrols and repairs are scheduled for completion by the 3rd Quarter 2011. 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, where indicated, spot trimming completed. Other maintenance, modifications or upgrades not completed during the initial patrol will be completed by the 2nd Quarter 2012. Additionally, engineering performed root cause analysis on recurrent problems and issued corrective action jobs for completion during 3rd Quarter 2012.

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Table 2: Highest 5% SAIFI Circuits					
Centers	Circuits	Substation	Action Plan	SAIFI	SAIDI
Marshall	3211	Mt Leonard	Replaced pole top hardware, arresters and crossarms	5.83	308.67
Northland	2741	Avondale	Pole top hardware, tree trim trees	5.32	1222.11
Dodson	3144	Forest	Replace failed equipment and replaced arresters	4.98	576.57
F&M	5372	Blue Valley	Replaced pole top hardware, poles, arresters	4.76	359.63
F&M	7402	Northeast	Replaced equipment overloads, pole top hardware, and arresters	4.57	450.91
F&M	578	Forest	Vegetation and Failed Equipment Repairs found during the patrols	4.17	305.73
Dodson	6111	Leeds	Failed Equipment Repairs found during the patrols- additional patrol replaced broken equipment	3.79	215.17
Northland	6311	Line Creek	Pole top hardware, tree trim trees	3.55	605.03
Dodson	3151	Forest	Trim Trees, equipment replaced, replaced arresters	3.40	555.33
Northland	7142	Randolph	Vegetation and Failed Equipment Repairs found during the patrols- additional patrols replaced broken equipment	3.33	118.81
Northland	1111	Barry	Vegetation and Failed Equipment Repairs found during the patrols	3.11	610.83
Marshall	5912	Gilliam	Replaced pole top hardware, poles, arresters, trim trees	3.07	422.43
Dodson	7563	Midtown	Replaced failed equipment, pole top hardware and varmint guard	3.02	202.40
Dodson	7532	Midtown	Repaired equipment defects, trimmed trees, replaced arresters	2.95	163.57
Northland	2733	Avondale	Pole top hardware, tree trim trees	2.94	2034.88
Dodson	2341	Southtown	Vegetation and Failed Equipment Repairs found during the patrols	2.83	418.38
F&M	5371	Blue Valley	Replaced pole top hardware, poles, arresters	2.61	288.40
Northland	4941	Weatherby	Vegetation and Failed Equipment Repairs found during the patrols	2.54	2211.72
Northland	4912	Weatherby	Vegetation and Failed Equipment Repairs found during the patrols	2.53	483.27
Northland	4962	Weatherby	Vegetation and Failed Equipment Repairs found during the patrols	2.53	999.65
Marshall	2521	Glasgow	Vegetation and Failed Equipment Repairs found during the patrols	2.52	95.33

Event days excluded from the KCP&L adjusted 2011 statistics: April 3-4; May 25; June 18-21, 25-27; July 12-13; August 3, 7-8, 18-22, 2011.

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

There were no Multi-Year Worst Performing Circuit to report.