

## Kansas City Power & Light Company 2013 Reliability Performance Report

Annual reporting completed pursuant to 4 CSR 240-23.010

April 30, 2014

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Table 1: KCP&L Reliability Indices					
Total Customers (Meter Co	276,535				
	SAIFI	0.816			
Adjusted	SAIDI	70.33			
Aujusteu	CAIDI	86.24			
	SAIDI         70.           CAIDI         86.           CAIFI         1.           SAIFI         1.1	1.12			
Unadjusted	SAIFI	1.180			
Unadjusted	SAIDI	208.40			
	CAIDI	176.60			
	CAIFI	1.17			

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

## 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 were completed in the 3<sup>rd</sup> and 4<sup>th</sup> Quarters 2013. 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, where indicated, spot trimming completed. Other maintenance, modifications or upgrades not completed during the initial patrol were completed by the 1<sup>st</sup> Quarter 2014. Additionally, engineering performed root cause analysis on recurring problems and issued corrective action jobs scheduled for completion during 2<sup>nd</sup> Quarter 2014.

Table 2: Highest 5% SAIFI Circuits							
Center	Circuit ID	<b>Substation ID</b>	Action Plan	<b>SAIFI</b>	SAIDI		
DOD	5642	56	Trees falling into Lines- trimmed	5.59	855.16		
עטע	3042	30	trees	3.39	633.10		
FM	7931	79	Arresters and Bad Switch (Install new arresters on the Equipment)	5.08	779.20		
1.141	1931	13	Regulator burned up; Replaced and	3.08	119.20		
EDST	5912	59	monitor. Storm\Weather Related	4.82	2648.66		
FM	5381	53	Trees and Overload	4.50	829.85		
FM	2442	24	Feeder cable failure- repaired	4.09	391.15		
DOD	7581	75	CO Relays On; Trees; Feeder cable	4.05	614.52		
			Jumper burnt off at switch; pole				
			down; put up OH primary;				
DOD	3134	31	Storm\Weather related	3.88	323.02		
FM	2412	24	Bad Switch SW6765; feeder cable failure; Storm\Weather related	3.72	125.62		
1111	2712	24	, ,	3.72	123.02		
FM	5371	53	Cable failure; pole and wire fell down -patrol circuit and made repairs	3.27	224.04		
FM	9622	96	Trees and vegetation	3.26	294.40		
DOD	2354	23	Trees and vegetation	3.23	357.99		
FM	7491	74	2 Feeder Cable Failures-repaired	3.17	225.53		
	, ,,	, ,	Jumper burnt off SW; Primary	5121			
DOD	3144	31	conductor fell to the ground	3.15	440.00		
			Car hit feeder pole; Arrester blown on				
			feeder near 3 phase recloser; Recloser				
FM	7911	79	failure- patrol and made repairs	3.13	164.76		
			Trees; burnt up switch; patrol circuit				
DOD	2303	23	and made repairs	2.80	288.38		
NLND	5261	52	Trees and vegetation	2.78	608.68		
			Trees; Crossarm broke- patrol and				
DOD	4822	48	made repairs	2.72	346.31		
FM	7492	74	Trees and vegetation	2.67	409.56		
FD 6		<b>5</b> 0	Trees and vegetation - patrol and	2 - 1	420.25		
FM	5332	53	repaired	2.64	439.26		
NII NID	1012	10	PO customer's switches, cutouts, and	2.62	500.07		
NLND	1012	10	arresters; patrol & replaced	2.62	500.87		
FM	5372	53	Replaced arresters\pole & guys	2.58	181.35		

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

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

The referenced rule requires the plan and a 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. Table 3 reflects the action plans implemented and completed in 2013 to lower the SAIFI metric for these circuits. Additional patrols and root-cause analysis, where required, will be completed in 2<sup>nd</sup> Quarter 2014.

Table 3: Multi-Year Worst Performing Circuit Report							
Year	Centers	Circuits	Substation	Action Plan	SAIFI	SAIDI	
2012 & 2013	Dodson	3134	Forest	Jumper burnt off at switch; pole down; put up OH primary; Storm\Weather related; Patrolled and made repairs	3.88	323.02	
2011 & 2012, 2013	Marshall	5912	Gilliam	Regulator burnt up, relocated 3 phase recloser, repaired sagging conductor; Storm\Weather related; Patrolled and made repairs	4.82	2648.66	
2011 & 2013	Dodson	3144	Forest	Jumper burnt off SW; Primary conductor fell to the ground; Storm\Weather related; Patrolled and made repairs	3.15	181.35	
2012 & 2013	F&M	7491	Northeast	2 Feeder Cable Failures-repaired	3.17	225.53	
2012 & 2013	F&M	5381	Blue Valley	Trees and Overload- Trees trimmed out; - 2011/Schedule to trim in 2015- Patrolled and made repairs	4.50	829.85	
2012 & 2013	F&M	7931	Blue Mills	Arresters and Bad Switch (Install new arresters on the Equipment)	5.08	779.20	

				Patrolled and made repairs		
2011 & 2013	F&M	5372	Blue Valley	Replaced arresters\pole & guys- Patrolled and made repairs	2.58	181.35
2011 & 2012	Marshall	3211	Mt Leonard	Repaired OH Wires\Trimmed Trees – completed 2013	3.14	426.81