

KENTUCKY POWER COMPANY  
DEPRECIATION STUDY AS OF DECEMBER 31, 2013  
DEPRECIATION STUDY WORKPAPERS  
TRANSMISSION PLANT  
SPR ANALYSIS

**KENTUCKY POWER COMPANY  
 SIMULATED PLANT RECORD ANALYSIS  
 DEPRECIATION STUDY AS OF DECEMBER 31, 2013**

**Account 354, Poles and Fixtures**

Simulated Plant Record Analysis

Kentucky Power - Transm

Account: KEPCo 101/6 354 - KY

Version: KEPCo Transmission SPR 2013

Method: Simulated Balances

No. of Test Points: 87      Interval: 0      Observation Band: 1927 - 2013

Dispersion	Avg Service Life	Sum of Squared Differences	Index of Variation	Conformance Index	Retirement Experience Index
R0.5	1153.0	9.72E+11	3.3601	297.61	2.89
R1	798.4	9.73E+11	3.3631	297.34	2.99
R1.5	556.0	9.77E+11	3.3697	296.76	3.16
S-.5	835.3	9.79E+11	3.3734	296.44	3.21
R2	326.4	9.89E+11	3.3895	295.03	3.89
R2.5	212.9	1.01E+12	3.4245	292.01	5.40
L1	281.3	1.06E+12	3.5147	284.52	6.91
L0.5	460.5	1.08E+12	3.5378	282.66	4.80
L0	622.9	1.08E+12	3.5475	281.89	4.57
L1.5	201.9	1.16E+12	3.6722	272.32	9.87
R3	121.3	1.19E+12	3.7162	269.09	15.35
S0	309.2	1.25E+12	3.8115	262.36	6.72
S0.5	226.3	1.29E+12	3.8691	258.46	8.49
SQ	49.2	1.52E+12	4.1996	238.12	100.00
S1	146.1	1.60E+12	4.3121	231.91	16.55
S6	51.0	1.60E+12	4.3135	231.83	100.00
L2	131.7	1.63E+12	4.3547	229.64	22.31
S1.5	121.3	1.64E+12	4.3686	228.91	22.18
R4	73.4	1.81E+12	4.5821	218.24	81.05
S5	53.9	1.87E+12	4.6624	214.48	100.00
S2	92.9	1.95E+12	4.7547	210.32	41.84
L3	87.6	1.98E+12	4.7923	208.67	54.62
R5	56.2	2.06E+12	4.8908	204.47	100.00
L5	57.1	2.09E+12	4.9335	202.70	99.58
S3	71.2	2.16E+12	5.0154	199.39	80.29
S4	59.6	2.17E+12	5.0253	198.99	99.66
L4	67.1	2.20E+12	5.0614	197.57	88.35

**KENTUCKY POWER COMPANY  
 SIMULATED PLANT RECORD ANALYSIS  
 DEPRECIATION STUDY AS OF DECEMBER 31, 2013**

**Account 355, Towers and Fixtures**

Simulated Plant Record Analysis  
 Kentucky Power - Transm

Account: KEPCo 101/6 355 - KY  
 Version: KEPCo Transmission SPR 2013  
 Method: Simulated Balances

No. of Test Points: 76      Interval: 0      Observation Band: 1938 - 2013

Dispersion	Avg Service Life	Sum of Squared Differences	Index of Variation	Conformance Index	Retirement Experience Index
L3	43.4	1.47E+12	10.4395	95.79	97.15
S2	43.3	1.52E+12	10.5971	94.37	99.63
S3	40.3	1.54E+12	10.6910	93.54	100.00
L2	49.0	1.55E+12	10.7261	93.23	87.66
S1.5	46.1	1.60E+12	10.8935	91.80	96.79
L4	39.6	1.62E+12	10.9593	91.25	99.98
R2.5	46.1	1.66E+12	11.1004	90.09	98.95
L1.5	54.8	1.69E+12	11.1740	89.49	78.56
S1	49.0	1.69E+12	11.1810	89.44	91.03
R3	43.0	1.73E+12	11.3035	88.47	100.00
R2	51.1	1.73E+12	11.3061	88.45	91.51
L1	61.2	1.80E+12	11.5304	86.73	68.73
S0.5	54.7	1.80E+12	11.5430	86.63	78.47
R1.5	58.8	1.89E+12	11.8343	84.50	72.62
S0	61.8	1.92E+12	11.9358	83.78	65.24
L0.5	73.1	1.94E+12	11.9984	83.34	56.76
S4	38.5	1.95E+12	12.0106	83.26	100.00
L5	38.3	1.98E+12	12.1106	82.57	100.00
R1	70.2	2.05E+12	12.3115	81.22	52.86
R4	39.6	2.05E+12	12.3222	81.15	100.00
L0	87.2	2.07E+12	12.3744	80.81	47.56
S-.5	80.6	2.08E+12	12.4083	80.59	46.19
R0.5	88.0	2.16E+12	12.6501	79.05	40.01
S5	37.6	2.41E+12	13.3436	74.94	100.00
R5	37.8	2.50E+12	13.6014	73.52	100.00
S6	37.0	2.75E+12	14.2761	70.05	100.00
SQ	39.1	9.30E+12	26.2394	38.11	100.00

**KENTUCKY POWER COMPANY  
 SIMULATED PLANT RECORD ANALYSIS  
 DEPRECIATION STUDY AS OF DECEMBER 31, 2013**

**Account 356, Overhead Conductor and Devices**

Simulated Plant Record Analysis

Kentucky Power - Transm

Account: KEPCo 101/6 356 - KY

Version: KEPCo Transmission SPR 2013

Method: Simulated Balances

No. of Test Points: 92                      Interval: 0                      Observation Band: 1922 - 2013

Dispersion	Avg Service Life	Sum of Squared Differences	Index of Variation	Conformance Index	Retirement Experience Index
R1	323.2	4.55E+11	2.2046	453.60	8.70
R0.5	459.5	4.56E+11	2.2080	452.90	7.89
S-.5	354.2	4.59E+11	2.2145	451.57	9.39
R1.5	234.2	4.62E+11	2.2211	450.23	9.91
R2	151.3	5.40E+11	2.4020	416.32	15.60
L0	316.3	6.31E+11	2.5958	385.24	12.43
L0.5	236.2	6.67E+11	2.6688	374.70	14.63
R2.5	111.8	7.55E+11	2.8394	352.19	26.48
L1	160.3	1.00E+12	3.2743	305.41	23.43
S0	179.9	1.08E+12	3.3996	294.15	17.95
S0.5	139.2	1.38E+12	3.8455	260.04	23.97
L1.5	126.5	1.50E+12	4.0071	249.56	31.75
R3	81.9	1.98E+12	4.5957	217.59	63.11
S1	103.9	2.75E+12	5.4186	184.55	39.24
L2	96.4	3.01E+12	5.6713	176.33	51.20
S1.5	89.4	3.19E+12	5.8423	171.17	52.52
SQ	48.7	3.65E+12	6.2480	160.05	100.00
S6	50.5	4.38E+12	6.8425	146.15	100.00
S2	75.6	4.70E+12	7.0886	141.07	73.69
L3	72.7	4.85E+12	7.1964	138.96	79.36
R4	62.4	4.91E+12	7.2409	138.10	99.97
R5	53.6	5.24E+12	7.4799	133.69	100.00
S5	52.3	5.45E+12	7.6294	131.07	100.00
L5	54.5	5.62E+12	7.7500	129.03	99.98
L4	60.3	5.63E+12	7.7549	128.95	97.44
S3	63.4	5.89E+12	7.9345	126.03	96.66
S4	56.1	6.17E+12	8.1212	123.13	100.00