



**Blue Grass Energy**

A Touchstone Energy Cooperative 

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# **Electric Distribution Utility Annual Reliability Report For 2015**

**April 2016**

# KENTUCKY PUBLIC SERVICE COMMISSION

## Electric Distribution Utility Annual Reliability Report

### SECTION 1: CONTACT INFORMATION

UTILITY NAME	Blue Grass Energy
REPORT PREPARED BY	Brent Boyer
E-MAIL ADDRESS OF PREPARER	<a href="mailto:brentb@bgenergy.com">brentb@bgenergy.com</a>
PHONE NUMBER OF PREPARER	859-885-2109

### SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2015
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### SECTION 3: MAJOR EVENT DAYS (MED)

$T_{MED}$	12.56
FIRST DATE USED TO DETERMINE $T_{MED}$	January 1 2010
LAST DATE USED TO DETERMINE $T_{MED}$	December 31 2014
NUMBER OF MED IN REPORT YEAR	2

NOTE: Per IEEE 1366  $T_{MED}$  should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

### SECTION 4: SYSTEM RELIABILITY INFORMATION AND RESULTS

#### System-wide Information

TOTAL CUSTOMER	56312	TOTAL CIRCUITS	131
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#### Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	121.22	SAIDI	143.38
SAIFI	1.16	SAIFI	1.22

#### Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	240.65	SAIDI	183.83
SAIFI	1.45	SAIFI	1.36

#### Notes:

- 1) All duration indices (SAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April of each year
- 3) Reports cover the calendar year ending in the December before the reports are filed
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, and  $T_{MED}$

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## SECTION 5: CIRCUIT REPORTING

(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)

(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED

### **CIRCUIT #1:**

1. SUBSTATION NAME AND NUMBER
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
3. CIRCUIT NAME AND NUMBER
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
5. TOTAL CIRCUIT LENGTH (MILES)
6. CUSTOMER COUNT FOR THIS CIRCUIT
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL C NUMBERS REPRESENTED BY EACH CAUSE
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
10. REPORTING YEAR (SAIDI)
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
12. REPORTING YEAR (SAIFI)
13. CORRECTIVE ACTION PLAN

REPEAT INFORMATION FOR EACH CIRCUIT EXCEEDING ITS 5 YEAR AVERAGE  
FOR SAIDI AND/OR SAIFI

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## **SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW**

### **INCLUDE CURRENT VEGETATION MANAGEMENT PLAN**

Additional page may be attached as needed.

Vegetation Management Plan Attached In Word Document

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## **SECTION 7: UTILITY COMMENTS**

Substation Name and Number 3M #2 184  
 Substation Location Hwy 982, Cynthiana, KY 41031  
 Circuit Name and Number 3M #2 184  
 Circuit Location Paris  
 Total Circuit Length (Miles) 52.1  
 2015 Member Count 518  
 Date of last Trim 6-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	248.23	2.0578	624.12	4.3340
Equipment Fault	11.75%	16.49%	19.53%	32.83%
Wind	32.22%	15.99%	41.78%	21.96%
Small Animal	3.68%	9.59%	7.11%	22.23%
Squirrel	8.39%	8.67%	0.00%	0.00%
Unknown Cause	1.45%	2.89%	0.03%	0.13%
Deterioration	0.06%	0.11%	0.06%	0.09%
Scheduled	15.79%	9.59%	31.31%	22.63%
Power Supplier	18.06%	26.98%	0.00%	0.00%
Bird	0.01%	0.04%	0.00%	0.00%
Overload	0.02%	0.02%	0.00%	0.00%
Public Accident	0.82%	2.72%	0.08%	0.09%
Tree - ROW	3.58%	2.89%	0.10%	0.04%
Lightning	1.52%	2.96%	0.00%	0.00%
Tree - Non ROW	2.64%	1.05%	0.00%	0.00%
Large Animal	0.01%	0.02%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

10-124

Substation Name and Number ALCAN 1 124  
Substation Location 302 Mayde Rd, Berea, KY 40403  
Circuit Name and Number ALCAN 1 124  
Circuit Location Mayde Rd  
Total Circuit Length (Miles) 3.3  
2015 Member Count 47  
Date of last Trim 2-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	101.64	1.1702	116.62	1.2128
Equipment Fault	3.20%	10.55%	0.00%	0.00%
Small Animal	5.86%	10.18%	0.00%	0.00%
Unknown Cause	27.34%	25.82%	0.00%	0.00%
Deterioration	36.06%	22.18%	74.07%	49.12%
Overload	0.75%	0.73%	0.00%	0.00%
Tree - ROW	7.62%	10.18%	0.00%	0.00%
Lightning	19.18%	20.36%	25.93%	50.88%

Corrections to be made: No corrections necessary at this time.

21-114

Substation Name and Number BRIDGEPORT 114  
 Substation Location Taylor Branch Rd., Frankfort, KY 40601  
 Circuit Name and Number BRIDGEPORT 114  
 Circuit Location Huntington Woods/Taylor Branch  
 Total Circuit Length (Miles) 83.3  
 2015 Member Count 1201  
 Date of last Trim 12-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	321.25	2.3453	398.79	2.5412
Equipment Fault	13.82%	21.89%	6.98%	17.10%
Wind	17.20%	15.02%	0.95%	0.79%
Small Animal	0.41%	0.87%	0.09%	0.66%
Squirrel	0.30%	0.66%	0.27%	0.92%
Unknown Cause	1.88%	3.63%	5.38%	11.21%
Deterioration	0.23%	0.43%	0.38%	0.69%
Scheduled	0.15%	0.61%	0.12%	0.16%
Power Supplier	21.94%	16.65%	0.00%	0.00%
Bird	0.12%	0.36%	0.06%	0.29%
Overload	0.01%	0.01%	0.03%	0.03%
Public Accident	0.93%	3.92%	0.00%	0.00%
Ice/Snow	2.81%	1.96%	11.12%	8.88%
Tree - ROW	6.02%	5.50%	1.78%	2.85%
Lightning	22.97%	16.33%	68.91%	45.05%
Tree - Non ROW	11.17%	12.16%	3.78%	11.24%
Large Animal	0.04%	0.03%	0.14%	0.13%

Corrections to be made: 2016-18 CWP conversion of deteriorating single phase conductor.

42-184

Substation Name and Number BRIDGEPORT 2 184  
 Substation Location Taylor Branch Rd., Frankfort, KY 40601  
 Circuit Name and Number BRIDGEPORT 2 184  
 Circuit Location Harvieland/Flat Creek  
 Total Circuit Length (Miles) 71.4  
 2015 Member Count 442  
 Date of last Trim 11-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>428.45</b>	<b>3.0143</b>	<b>704.87</b>	<b>5.0520</b>
Equipment Fault	7.12%	5.52%	3.84%	1.70%
Wind	19.66%	11.83%	14.61%	11.69%
Small Animal	0.08%	0.15%	0.13%	0.31%
Squirrel	2.42%	6.44%	0.00%	0.00%
Unknown Cause	7.97%	9.11%	17.42%	17.87%
Deterioration	2.19%	1.67%	0.08%	0.18%
Power Supplier	8.05%	7.70%	0.00%	0.00%
Bird	0.01%	0.02%	0.00%	0.00%
Public Accident	0.47%	0.89%	0.00%	0.00%
Ice/Snow	13.22%	12.01%	38.07%	33.45%
Tree - ROW	6.14%	3.77%	0.03%	0.04%
Lightning	22.34%	27.52%	23.39%	33.41%
Tree - Non ROW	10.33%	13.39%	2.43%	1.34%

Corrections to be made: Storm Related Outages, No correction necessary at this time.

Substation Name and Number CLAY\_LICK 134  
 Substation Location Louisville, Rd., Salvisa, KY 40372  
 Circuit Name and Number CLAY\_LICK 134  
 Circuit Location Lillard's Ferry/Scott's Ferry  
 Total Circuit Length (Miles) 50.3  
 2015 Member Count 341  
 Date of last Trim 9-2010

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	130.94	1.0504	561.07	3.7273
Equipment Fault	0.83%	1.01%	0.28%	0.63%
Wind	17.07%	21.83%	13.62%	26.99%
Small Animal	0.73%	1.23%	0.37%	0.63%
Squirrel	0.70%	1.51%	0.25%	0.55%
Unknown Cause	1.85%	2.90%	0.27%	0.55%
Deterioration	0.31%	0.67%	0.21%	0.31%
Scheduled	1.42%	3.41%	0.37%	2.52%
Power Supplier	1.90%	16.91%	0.00%	0.00%
Bird	0.02%	0.06%	0.00%	0.00%
Overload	0.03%	0.06%	0.00%	0.00%
Ice/Snow	20.18%	8.49%	23.54%	11.96%
Sag/Clearance	0.26%	0.22%	0.30%	0.31%
Tree - ROW	1.90%	1.73%	0.00%	0.00%
Lightning	34.41%	19.82%	39.72%	27.38%
Tree - Non ROW	18.39%	20.16%	21.07%	28.17%

Corrections to be made: Circuit to be trimmed in 2016.

26-144

Substation Name and Number CLAY\_LICK 144  
Substation Location Louisville, Rd., Salvisa, KY 40372  
Circuit Name and Number CLAY\_LICK 144  
Circuit Location Bond's Mill  
Total Circuit Length (Miles) 54.6  
2015 Member Count 612  
Date of last Trim 9-2010

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	14.68%	9.64%	21.15%	17.51%
Wind	25.66%	20.61%	39.28%	39.28%
Small Animal	3.18%	3.98%	1.53%	2.58%
Squirrel	4.49%	5.02%	0.98%	1.55%
Unknown Cause	19.60%	21.31%	15.60%	20.87%
Deterioration	3.72%	3.21%	2.38%	2.33%
Scheduled	0.92%	1.24%	0.00%	0.00%
Power Supplier	4.19%	18.19%	0.00%	0.00%
Bird	1.09%	1.27%	0.00%	0.00%
Public Accident	3.98%	3.15%	0.79%	1.36%
Tree - ROW	0.02%	0.03%	0.03%	0.06%
Lightning	15.79%	10.17%	15.18%	11.82%
Tree - Non ROW	2.68%	2.17%	3.07%	2.65%

Corrections to be made: Circuit to be trimmed in 2016.

32-114

Substation Name and Number COLEMANSVILLE 114  
 Substation Location Corner of HWY 1032 & 1054, Berry, KY 41003  
 Circuit Name and Number COLEMANSVILLE 114  
 Circuit Location Kelat  
 Total Circuit Length (Miles) 62.7  
 2015 Member Count 417  
 Date of last Trim 1-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	49.48	0.5060	52.12	0.3285
Equipment Fault	18.86%	18.10%	0.00%	0.00%
Wind	0.18%	0.38%	0.00%	0.00%
Small Animal	3.75%	4.74%	0.85%	3.65%
Squirrel	0.75%	0.95%	0.71%	1.46%
Unknown Cause	2.65%	5.12%	0.23%	0.73%
Deterioration	14.97%	20.09%	0.43%	0.73%
Scheduled	4.11%	5.21%	0.00%	0.00%
Bird	0.35%	0.47%	0.50%	0.73%
Public Accident	5.28%	11.94%	0.00%	0.00%
Ice/Snow	8.77%	3.70%	8.10%	14.60%
Tree - ROW	0.17%	0.09%	0.00%	0.00%
Lightning	40.06%	29.10%	89.18%	78.10%
Tree - Non ROW	0.09%	0.09%	0.00%	0.00%

Corrections to be made: Storm caused outages, no actions necessary at this time.

Substation Name and Number COLEMANSVILLE 124  
 Substation Location Corner of HWY 1032 & 1054, Berry, KY 41003  
 Circuit Name and Number COLEMANSVILLE 124  
 Circuit Location Robinson  
 Total Circuit Length (Miles) 58.1  
 2015 Member Count 589  
 Date of last Trim 10-2012

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	125.17	1.2992	188.30	1.6689
Equipment Fault	3.65%	3.79%	0.00%	0.00%
Wind	3.41%	3.01%	0.00%	0.00%
Small Animal	6.14%	9.59%	2.96%	6.71%
Squirrel	0.12%	0.29%	0.11%	0.31%
Unknown Cause	17.88%	26.48%	2.83%	4.58%
Deterioration	8.53%	5.41%	12.96%	6.21%
Scheduled	1.77%	1.88%	0.80%	0.92%
Bird	0.46%	0.89%	0.02%	0.10%
Overload	0.45%	2.06%	0.00%	0.00%
Public Accident	2.35%	2.77%	3.87%	5.29%
Ice/Snow	11.40%	2.67%	0.49%	0.71%
Fire	10.18%	10.79%	0.10%	0.20%
Tree - ROW	0.50%	0.71%	0.53%	1.02%
Lightning	26.55%	23.84%	75.35%	73.96%
Tree - Non ROW	6.63%	5.83%	0.00%	0.00%

Corrections to be made: Storm caused outages, no corrective actions necessary at this time.

Substation Name and Number COLEMANSVILLE 134  
 Substation Location Corner of HWY 1032 & 1054, Berry, KY 41003  
 Circuit Name and Number COLEMANSVILLE 134  
 Circuit Location Renaker  
 Total Circuit Length (Miles) 77.0  
 2015 Member Count 484  
 Date of last Trim 9-2012

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	67.32	0.5045	50.88	0.7231
Equipment Fault	12.24%	8.93%	39.09%	12.29%
Small Animal	1.03%	2.05%	3.68%	4.00%
Squirrel	1.54%	2.70%	0.32%	0.29%
Unknown Cause	3.61%	3.60%	0.00%	0.00%
Deterioration	6.72%	4.83%	0.27%	0.29%
Scheduled	6.60%	23.59%	30.32%	69.14%
Bird	0.09%	0.16%	0.00%	0.00%
Public Accident	7.12%	7.04%	0.00%	0.00%
Ice/Snow	26.60%	9.99%	1.02%	1.71%
Tree - ROW	0.10%	0.16%	0.00%	0.00%
Lightning	21.79%	25.96%	3.22%	1.71%
Tree - Non ROW	12.56%	10.97%	22.08%	10.57%

Corrections to be made: No actions necessary at this time.

Substation Name and Number DAVIS 104  
 Substation Location Delong Rd., Lexington, KY 40515  
 Circuit Name and Number DAVIS 104  
 Circuit Location Ashgrove Pike  
 Total Circuit Length (Miles) 19.5  
 2015 Member Count 346  
 Date of last Trim 10-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	74.45	1.0634	74.39	1.4393
Equipment Fault	0.72%	0.33%	3.61%	1.20%
Wind	0.49%	0.16%	0.00%	0.00%
Small Animal	9.17%	7.34%	6.05%	5.82%
Squirrel	0.67%	0.87%	0.00%	0.00%
Unknown Cause	5.06%	5.93%	0.00%	0.00%
Deterioration	3.01%	1.52%	14.76%	5.02%
Scheduled	0.76%	0.38%	0.00%	0.00%
Power Supplier	1.27%	17.81%	0.00%	0.00%
Bird	2.82%	3.37%	0.00%	0.00%
Public Accident	0.10%	0.11%	0.00%	0.00%
Tree - ROW	21.39%	25.98%	61.60%	73.09%
Lightning	35.91%	21.80%	13.98%	14.86%
Tree - Non ROW	18.63%	14.41%	0.00%	0.00%

Corrections to be made: Circuit recently trimmed, No actions necessary at this time.

Substation Name and Number DAVIS 124  
 Substation Location Delong Rd., Lexington, KY 40515  
 Circuit Name and Number DAVIS 124  
 Circuit Location E Hickman  
 Total Circuit Length (Miles) 79.3  
 2015 Member Count 636  
 Date of last Trim 10-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	140.30	2.0812	338.86	4.3223
Equipment Fault	44.04%	47.02%	54.05%	45.94%
Wind	16.05%	11.06%	27.39%	22.37%
Small Animal	0.81%	0.68%	0.70%	0.84%
Squirrel	2.60%	1.30%	0.00%	0.00%
Unknown Cause	2.74%	2.52%	4.54%	4.51%
Deterioration	0.56%	0.36%	0.00%	0.00%
Scheduled	0.08%	0.12%	0.06%	0.07%
Power Supplier	0.67%	9.10%	0.00%	0.00%
Bird	0.53%	0.70%	0.00%	0.00%
Overload	3.17%	9.29%	6.56%	22.37%
Public Accident	18.33%	10.44%	0.00%	0.00%
Ice/Snow	0.22%	0.15%	0.29%	0.22%
Sag/Clearance	0.02%	0.02%	0.04%	0.04%
Tree - ROW	4.74%	3.25%	2.27%	1.56%
Lightning	1.10%	1.13%	0.04%	0.04%
Tree - Non ROW	4.32%	2.86%	4.05%	2.04%

Corrections to be made: Equipment fault has been repaired, no action necessary at this time.

6-114

Substation Name and Number FAYETTE2 114  
Substation Location Armstrong Mill, Lexington, KY 40515  
Circuit Name and Number FAYETTE2 114  
Circuit Location Hartland  
Total Circuit Length (Miles) 11.6  
2015 Member Count 700  
Date of last Trim 2-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	54.22%	31.23%	24.90%	6.23%
Small Animal	17.69%	29.52%	19.37%	48.70%
Squirrel	0.46%	0.50%	0.00%	0.00%
Deterioration	0.09%	0.10%	0.00%	0.00%
Scheduled	9.09%	16.30%	55.73%	45.07%
Power Supplier	7.04%	7.75%	0.00%	0.00%
Overload	0.02%	0.04%	0.00%	0.00%
Fire	10.96%	13.99%	0.00%	0.00%
Lightning	0.04%	0.04%	0.00%	0.00%
Tree - Non ROW	0.40%	0.54%	0.00%	0.00%

Corrections to be made: No actions necessary at this time.

Substation Name and Number FOUR\_OAKS 114  
 Substation Location US 27, Falmouth, KY 40410  
 Circuit Name and Number FOUR\_OAKS 114  
 Circuit Location Broadford  
 Total Circuit Length (Miles) 39.4  
 2015 Member Count 204  
 Date of last Trim 8-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	140.00	1.0176	234.85	1.2549
Equipment Fault	26.12%	20.71%	26.03%	25.00%
Wind	12.42%	5.59%	23.82%	9.38%
Small Animal	1.94%	3.76%	0.64%	1.56%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	15.65%	19.94%	2.77%	6.25%
Deterioration	12.73%	7.71%	33.27%	24.61%
Scheduled	0.15%	0.19%	0.00%	0.00%
Power Supplier	6.81%	18.01%	0.00%	0.00%
Bird	0.21%	0.48%	0.00%	0.00%
Public Accident	1.67%	1.45%	0.00%	0.00%
Tree - ROW	3.47%	5.97%	0.00%	0.00%
Lightning	8.07%	13.39%	13.47%	33.20%
Tree - Non ROW	10.76%	2.79%	0.00%	0.00%

Corrections to be made: Storm caused outages, no action necessary at this time.

Substation Name and Number FOUR\_OAKS 124  
 Substation Location US 27, Falmouth, KY 40410  
 Circuit Name and Number FOUR\_OAKS 124  
 Circuit Location Morgan  
 Total Circuit Length (Miles) 78.4  
 2015 Member Count 946  
 Date of last Trim 12-2010

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	147.13	1.3598	276.89	1.5085
Equipment Fault	10.59%	7.94%	7.85%	11.07%
Wind	1.75%	3.25%	0.00%	0.00%
Small Animal	4.45%	9.14%	0.49%	2.80%
Squirrel	0.45%	0.67%	0.08%	0.28%
Unknown Cause	6.24%	10.00%	3.48%	10.93%
Deterioration	16.72%	10.04%	2.95%	2.31%
Scheduled	1.15%	1.87%	0.23%	0.49%
Power Supplier	6.48%	13.48%	0.00%	0.00%
Bird	1.06%	0.96%	1.88%	2.17%
Overload	0.75%	1.00%	2.01%	4.48%
Public Accident	18.23%	22.96%	22.68%	24.04%
Ice/Snow	1.60%	0.56%	0.00%	0.00%
Fire	0.19%	0.22%	0.00%	0.00%
Tree - ROW	0.05%	0.06%	0.00%	0.00%
Lightning	8.65%	9.90%	2.44%	7.78%
Tree - Non ROW	21.12%	7.49%	55.91%	33.64%
Large Animal	0.50%	0.45%	0.00%	0.00%

Corrections to be made: Circuit to be trimmed in 2016. 2016-18 CWP conversion of deteriorating conductor.

Substation Name and Number FOUR\_OAKS 134  
 Substation Location US 27, Falmouth, KY 40410  
 Circuit Name and Number FOUR\_OAKS 134  
 Circuit Location Sunrise  
 Total Circuit Length (Miles) 129.3  
 2015 Member Count 735  
 Date of last Trim 11-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	107.00	0.7947	89.90	0.8163
Equipment Fault	9.71%	10.10%	13.17%	11.33%
Wind	5.10%	2.64%	6.07%	5.00%
Small Animal	3.47%	7.40%	18.97%	33.17%
Squirrel	0.05%	0.10%	0.17%	0.33%
Unknown Cause	5.31%	7.43%	12.76%	14.50%
Deterioration	11.45%	14.48%	26.95%	17.00%
Scheduled	0.04%	0.24%	0.17%	0.50%
Power Supplier	8.91%	23.07%	0.00%	0.00%
Bird	0.30%	0.48%	0.00%	0.00%
Public Accident	1.97%	3.32%	4.28%	3.83%
Ice/Snow	29.56%	11.16%	0.00%	0.00%
Tree - ROW	2.02%	1.37%	11.90%	6.33%
Lightning	14.75%	15.30%	5.56%	8.00%
Tree - Non ROW	7.38%	2.91%	0.00%	0.00%

Corrections to be made: No corrective action necessary at this time.

36-104

Substation Name and Number HEADQUARTERS 104  
Substation Location Saltwell Headquarters, Rd., Carlisle, KY 40311  
Circuit Name and Number HEADQUARTERS 104  
Circuit Location US 68  
Total Circuit Length (Miles) 9.6  
2015 Member Count 77  
Date of last Trim 5-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	58.48	0.9837	54.49	1.3865
Equipment Fault	2.32%	1.85%	0.00%	0.00%
Wind	1.91%	0.79%	0.00%	0.00%
Small Animal	6.21%	5.02%	0.00%	0.00%
Squirrel	6.69%	5.28%	28.96%	14.05%
Unknown Cause	10.87%	8.71%	30.56%	14.99%
Scheduled	1.42%	2.11%	0.00%	0.00%
Power Supplier	12.31%	39.27%	34.86%	70.03%
Bird	0.25%	0.26%	0.00%	0.00%
Tree - ROW	0.53%	0.26%	0.00%	0.00%
Lightning	23.76%	17.16%	5.62%	0.94%
Tree - Non ROW	33.72%	19.27%	0.00%	0.00%

Corrections to be made: No action necessary at this time.

Substation Name and Number HEADQUARTERS 114  
 Substation Location Saltwell Headquarters, Rd., Carlisle, KY 40311  
 Circuit Name and Number HEADQUARTERS 114  
 Circuit Location Arther Rd  
 Total Circuit Length (Miles) 27.4  
 2015 Member Count 158  
 Date of last Trim 8-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	162.24	1.1711	456.01	2.6671
Equipment Fault	0.41%	0.32%	0.46%	0.47%
Wind	0.17%	0.32%	0.00%	0.00%
Small Animal	0.47%	0.97%	0.18%	0.47%
Squirrel	0.05%	0.22%	0.09%	0.47%
Unknown Cause	6.01%	19.43%	2.37%	5.70%
Deterioration	24.70%	21.73%	0.00%	0.00%
Scheduled	1.24%	3.13%	0.41%	0.95%
Power Supplier	5.03%	16.58%	8.94%	36.40%
Bird	0.63%	1.84%	0.00%	0.00%
Overload	7.36%	6.59%	13.10%	14.48%
Public Accident	2.50%	1.95%	4.45%	4.27%
Sag/Clearance	1.09%	2.59%	0.00%	0.00%
Lightning	42.06%	19.67%	70.00%	36.78%
Tree - Non ROW	7.56%	3.78%	0.00%	0.00%
Large Animal	0.71%	0.86%	0.00%	0.00%

Corrections to be made: No action necessary at this time.

Substation Name and Number HEADQUARTERS 124  
 Substation Location Saltwell Headquarters, Rd., Carlisle, KY 40311  
 Circuit Name and Number HEADQUARTERS 124  
 Circuit Location Colville  
 Total Circuit Length (Miles) 30.4  
 2015 Member Count 178  
 Date of last Trim 7-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	76.65	0.9358	218.03	2.8304
Equipment Fault	4.27%	1.80%	6.82%	2.58%
Small Animal	15.94%	8.29%	27.22%	12.50%
Unknown Cause	11.32%	23.18%	1.28%	1.19%
Deterioration	15.24%	22.81%	25.33%	36.32%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	10.64%	20.75%	18.70%	34.30%
Bird	1.74%	1.32%	0.00%	0.00%
Public Accident	0.22%	0.24%	0.00%	0.00%
Sag/Clearance	4.98%	2.64%	0.00%	0.00%
Tree - ROW	0.58%	0.36%	0.00%	0.00%
Lightning	33.12%	17.05%	20.64%	13.10%
Tree - Non ROW	0.90%	0.24%	0.00%	0.00%
Large Animal	1.05%	1.32%	0.00%	0.00%

Corrections to be made: No corrective action necessary at this time.

Substation Name and Number HEADQUARTERS 134  
 Substation Location Saltwell Headquarters, Rd., Carlisle, KY 40311  
 Circuit Name and Number HEADQUARTERS 134  
 Circuit Location Morning Glory  
 Total Circuit Length (Miles) 63.1  
 2015 Member Count 376  
 Date of last Trim 9-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	291.41	2.7948	442.42	4.3831
Equipment Fault	32.80%	22.10%	21.53%	11.83%
Wind	11.59%	4.07%	38.02%	12.86%
Small Animal	1.91%	5.54%	5.26%	15.72%
Squirrel	1.40%	1.71%	0.06%	0.12%
Unknown Cause	14.11%	15.72%	18.71%	22.94%
Deterioration	5.77%	8.18%	0.00%	0.00%
Scheduled	2.97%	10.35%	1.58%	5.89%
Power Supplier	5.30%	13.82%	9.22%	22.15%
Bird	0.01%	0.02%	0.00%	0.00%
Overload	0.01%	0.02%	0.05%	0.06%
Public Accident	0.96%	0.57%	0.00%	0.00%
Ice/Snow	9.47%	4.49%	3.97%	3.03%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	9.69%	7.08%	0.00%	0.00%
Lightning	3.38%	4.85%	1.35%	1.46%
Tree - Non ROW	0.55%	0.21%	0.06%	0.06%
Large Animal	0.02%	0.04%	0.00%	0.00%
Contractor	0.06%	1.22%	0.19%	3.88%

Corrections to be made: 2016-18 CWP conversion of deteriorating conductor.

Substation Name and Number HEADQUARTERS 144  
 Substation Location Saltwell Headquarters, Rd., Carlisle, KY 40311  
 Circuit Name and Number HEADQUARTERS 144  
 Circuit Location Kentontown  
 Total Circuit Length (Miles) 118.2  
 2015 Member Count 688  
 Date of last Trim 12-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	256.01	1.6718	364.86	2.3532
Equipment Fault	44.36%	33.58%	78.66%	47.81%
Wind	4.45%	0.94%	0.00%	0.00%
Small Animal	1.15%	1.65%	0.30%	0.74%
Squirrel	0.81%	1.79%	1.36%	1.73%
Unknown Cause	1.39%	3.43%	0.21%	0.49%
Deterioration	0.97%	1.01%	0.02%	0.06%
Scheduled	0.13%	0.33%	0.15%	0.37%
Power Supplier	6.04%	23.11%	11.18%	41.26%
Bird	0.02%	0.03%	0.00%	0.00%
Public Accident	1.39%	2.52%	0.00%	0.00%
Ice/Snow	7.94%	2.59%	0.20%	0.19%
Fire	0.01%	0.02%	0.02%	0.06%
Tree - ROW	3.28%	3.32%	0.00%	0.00%
Lightning	18.30%	17.67%	2.94%	3.95%
Tree - Non ROW	9.77%	8.02%	4.96%	3.34%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number HICKORY PLAINS 124  
 Substation Location Old US 25, Berea, KY 40403  
 Circuit Name and Number HICKORY PLAINS 124  
 Circuit Location Wildlife Reserve  
 Total Circuit Length (Miles) 47.1  
 2015 Member Count 758  
 Date of last Trim 4-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	71.82	0.6325	208.79	1.3681
Equipment Fault	49.91%	35.50%	78.89%	71.55%
Wind	1.85%	3.25%	0.09%	0.19%
Small Animal	2.14%	5.17%	1.55%	3.47%
Squirrel	7.05%	5.97%	9.63%	9.35%
Unknown Cause	6.08%	11.51%	3.38%	7.91%
Deterioration	5.45%	5.01%	0.00%	0.00%
Scheduled	0.34%	0.29%	0.13%	0.39%
Bird	0.36%	1.17%	0.00%	0.00%
Public Accident	9.73%	11.10%	0.00%	0.00%
Ice/Snow	0.11%	0.04%	0.00%	0.00%
Tree - ROW	2.15%	2.38%	0.00%	0.00%
Lightning	7.35%	9.22%	2.65%	4.24%
Tree - Non ROW	7.45%	9.39%	3.67%	2.89%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number HICKORY PLAINS 134  
 Substation Location Old US 25, Berea, KY 40403  
 Circuit Name and Number HICKORY PLAINS 134  
 Circuit Location Red Lick  
 Total Circuit Length (Miles) 72.6  
 2015 Member Count 1104  
 Date of last Trim 5-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	45.61	0.5051	46.77	0.5208
Equipment Fault	6.06%	6.74%	2.38%	2.96%
Wind	3.92%	2.51%	0.66%	0.35%
Small Animal	4.25%	5.99%	10.78%	10.26%
Squirrel	0.42%	0.79%	0.00%	0.00%
Unknown Cause	11.19%	12.80%	14.67%	10.26%
Deterioration	0.74%	0.36%	3.47%	1.57%
Scheduled	0.34%	0.75%	0.45%	0.52%
Bird	0.34%	0.57%	1.36%	1.91%
Overload	0.05%	0.11%	0.00%	0.00%
Public Accident	39.53%	43.04%	32.70%	49.04%
Ice/Snow	0.11%	0.04%	0.00%	0.00%
Tree - ROW	6.57%	5.31%	0.00%	0.00%
Lightning	8.66%	6.89%	11.53%	6.26%
Tree - Non ROW	17.13%	12.95%	20.35%	14.09%
Large Animal	0.70%	1.15%	1.64%	2.78%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number HOLLOWAY 124  
 Substation Location Harrodsburg Rd., Nicholasville, KY 40356  
 Circuit Name and Number HOLLOWAY 124  
 Circuit Location 0  
 Total Circuit Length (Miles) 30.4  
 2015 Member Count 375  
 Date of last Trim 12-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	63.68	1.0627	90.20	1.1520
Equipment Fault	1.85%	1.61%	0.44%	0.23%
Wind	0.24%	0.30%	0.00%	0.00%
Small Animal	1.66%	2.11%	3.82%	6.71%
Squirrel	0.84%	1.10%	0.00%	0.00%
Unknown Cause	4.69%	4.67%	0.00%	0.00%
Deterioration	1.48%	0.95%	0.24%	0.46%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	22.57%	34.51%	0.00%	0.00%
Bird	0.11%	0.15%	0.00%	0.00%
Public Accident	21.34%	13.65%	0.00%	0.00%
Tree - ROW	3.70%	2.51%	0.00%	0.00%
Lightning	15.50%	19.77%	4.17%	6.94%
Tree - Non ROW	25.95%	18.62%	91.32%	85.65%
Large Animal	0.05%	0.05%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number LEES\_LICK 104  
 Substation Location HWY 1842, Cynthiana, KY 41031  
 Circuit Name and Number LEES\_LICK 104  
 Circuit Location Davis  
 Total Circuit Length (Miles) 86.4  
 2015 Member Count 611  
 Date of last Trim 5-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	189.45	1.5667	257.57	2.3279
Equipment Fault	14.05%	11.01%	6.17%	3.94%
Wind	0.48%	0.23%	0.04%	0.14%
Small Animal	1.13%	1.44%	0.53%	0.77%
Squirrel	0.83%	0.67%	0.10%	0.07%
Unknown Cause	7.98%	3.80%	0.40%	0.35%
Deterioration	2.69%	2.24%	0.06%	0.07%
Scheduled	1.05%	2.88%	0.11%	0.21%
Power Supplier	11.94%	35.32%	13.07%	40.17%
Bird	1.56%	1.38%	0.00%	0.00%
Overload	9.77%	10.84%	0.00%	0.00%
Ice/Snow	15.14%	3.43%	8.09%	2.32%
Sag/Clearance	0.26%	0.71%	0.00%	0.00%
Tree - ROW	0.17%	0.13%	0.08%	0.07%
Lightning	18.72%	17.91%	49.79%	41.20%
Tree - Non ROW	14.16%	7.92%	21.37%	10.41%
Large Animal	0.05%	0.08%	0.20%	0.28%
Vandalism	0.02%	0.02%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number LEES\_LICK 114  
 Substation Location HWY 1842, Cynthiana, KY 41031  
 Circuit Name and Number LEES\_LICK 114  
 Circuit Location White Oak  
 Total Circuit Length (Miles) 55.5  
 2015 Member Count 451  
 Date of last Trim 12-2009

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	75.01	1.1965	88.02	1.5448
Equipment Fault	2.15%	1.41%	0.96%	0.43%
Wind	21.29%	20.31%	9.50%	8.32%
Small Animal	5.71%	3.37%	17.74%	7.18%
Squirrel	0.12%	0.19%	0.29%	0.43%
Unknown Cause	3.68%	3.15%	8.46%	4.02%
Scheduled	0.02%	0.04%	0.00%	0.00%
Power Supplier	29.68%	46.04%	38.24%	60.53%
Bird	1.03%	1.33%	0.00%	0.00%
Overload	0.53%	0.82%	0.00%	0.00%
Public Accident	3.57%	2.26%	0.13%	0.14%
Ice/Snow	0.14%	0.04%	0.00%	0.00%
Sag/Clearance	0.20%	0.15%	0.00%	0.00%
Tree - ROW	2.02%	1.63%	8.61%	6.32%
Lightning	26.17%	17.75%	15.99%	12.49%
Tree - Non ROW	3.69%	1.52%	0.08%	0.14%

Corrections to be made: No corrections necessary at this time.

34-124

Substation Name and Number LEES\_LICK 124  
Substation Location HWY 1842, Cynthiana, KY 41031  
Circuit Name and Number LEES\_LICK 124  
Circuit Location Leesburg  
Total Circuit Length (Miles) 13.0  
2015 Member Count 157  
Date of last Trim 11-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	108.80	1.3779	179.11	2.0306
Equipment Fault	7.47%	4.25%	0.00%	0.00%
Wind	10.58%	5.45%	32.14%	18.51%
Small Animal	1.58%	2.22%	2.89%	4.39%
Unknown Cause	3.08%	2.22%	9.35%	7.53%
Deterioration	6.49%	6.47%	0.00%	0.00%
Scheduled	0.89%	0.55%	0.00%	0.00%
Power Supplier	20.30%	40.18%	18.79%	46.05%
Bird	0.15%	0.28%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	1.77%	5.36%	0.00%	0.00%
Ice/Snow	0.49%	0.18%	1.50%	0.63%
Tree - ROW	0.09%	0.18%	0.28%	0.63%
Lightning	47.09%	32.64%	35.04%	22.27%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number LEES\_LICK 134  
 Substation Location HWY 1842, Cynthiana, KY 41031  
 Circuit Name and Number LEES\_LICK 134  
 Circuit Location Hicks/Muddy Ford  
 Total Circuit Length (Miles) 79.1  
 2015 Member Count 721  
 Date of last Trim 1-2010

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	217.34	1.8257	271.14	2.1639
Equipment Fault	21.59%	16.65%	44.97%	20.06%
Wind	8.86%	10.91%	0.00%	0.00%
Small Animal	1.07%	1.88%	1.75%	4.49%
Squirrel	0.56%	1.70%	1.30%	2.88%
Unknown Cause	13.18%	23.56%	3.00%	5.13%
Deterioration	1.69%	0.79%	0.00%	0.00%
Scheduled	0.76%	2.11%	0.22%	0.38%
Power Supplier	9.02%	20.18%	12.42%	43.21%
Bird	0.01%	0.03%	0.05%	0.13%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	1.02%	1.55%	1.21%	1.92%
Ice/Snow	0.02%	0.03%	0.00%	0.00%
Tree - ROW	8.08%	4.25%	32.16%	17.63%
Lightning	2.90%	2.84%	2.83%	4.10%
Tree - Non ROW	30.88%	12.99%	0.09%	0.06%
Large Animal	0.37%	0.52%	0.00%	0.00%

Corrections to be made: Circuit to be trimmed this year.

34-144

Substation Name and Number LEES\_LICK 144  
Substation Location HWY 1842, Cynthiana, KY 41031  
Circuit Name and Number LEES\_LICK 144  
Circuit Location Newtown  
Total Circuit Length (Miles) 3.1  
2015 Member Count 16  
Date of last Trim 1-2009

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	78.44	1.1302	165.04	2.1226
Equipment Fault	0.00%	0.00%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	2.87%	1.11%	0.00%	0.00%
Deterioration	24.09%	9.95%	57.26%	26.50%
Scheduled	8.61%	16.59%	0.00%	0.00%
Power Supplier	39.53%	49.12%	20.40%	44.05%
Lightning	24.91%	23.23%	22.34%	29.45%

Corrections to be made: No corrections necessary at this time.

25-114

Substation Name and Number MERCER\_CO 114  
Substation Location Industrial Park Drive, Harrodsburg, KY 40330  
Circuit Name and Number MERCER\_CO 114  
Circuit Location Mt Pleasant  
Total Circuit Length (Miles) 25.4  
2015 Member Count 255  
Date of last Trim 11-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	49.65	0.5640	54.40	0.5765
Equipment Fault	0.23%	0.28%	0.00%	0.00%
Wind	14.41%	10.57%	0.00%	0.00%
Small Animal	0.57%	0.70%	0.80%	1.36%
Squirrel	0.21%	0.42%	0.09%	0.68%
Unknown Cause	3.05%	4.03%	0.14%	0.68%
Deterioration	27.15%	11.68%	0.56%	0.68%
Power Supplier	21.49%	42.01%	0.00%	0.00%
Bird	23.42%	20.30%	70.20%	57.14%
Lightning	9.43%	9.87%	28.22%	39.46%
Large Animal	0.05%	0.14%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number MILLERSBURG 104  
 Substation Location Miller Station Rd., Carlisle, KY 40311  
 Circuit Name and Number MILLERSBURG 104  
 Circuit Location Lake Carnico  
 Total Circuit Length (Miles) 91.8  
 2015 Member Count 382  
 Date of last Trim 10-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	230.19	1.6205	522.85	2.5142
Equipment Fault	7.90%	9.95%	0.39%	0.83%
Wind	2.35%	2.04%	0.04%	0.10%
Small Animal	0.86%	1.81%	0.93%	3.02%
Squirrel	0.08%	0.13%	0.09%	0.21%
Unknown Cause	1.84%	3.52%	0.75%	1.67%
Deterioration	0.51%	0.58%	0.14%	0.31%
Scheduled	1.42%	5.72%	0.00%	0.00%
Power Supplier	7.28%	23.85%	7.79%	38.57%
Bird	0.14%	0.32%	0.00%	0.00%
Overload	0.02%	0.03%	0.00%	0.00%
Public Accident	0.45%	0.42%	0.00%	0.00%
Ice/Snow	13.16%	4.59%	28.89%	14.58%
Sag/Clearance	0.02%	0.03%	0.00%	0.00%
Tree - ROW	1.76%	0.61%	0.06%	0.10%
Lightning	40.72%	32.99%	60.93%	40.61%
Tree - Non ROW	21.50%	13.41%	0.00%	0.00%

Corrections to be made: Storm related outages, no corrections necessary at this time.

Substation Name and Number MILLERSBURG 114  
 Substation Location Miller Station Rd., Carlisle, KY 40311  
 Circuit Name and Number MILLERSBURG 114  
 Circuit Location Little Rock  
 Total Circuit Length (Miles) 86.3  
 2015 Member Count 472  
 Date of last Trim 3-2014

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	128.07	1.1312	210.29	1.8172
Equipment Fault	2.71%	3.33%	0.00%	0.00%
Wind	0.20%	0.04%	0.00%	0.00%
Small Animal	1.71%	2.55%	0.05%	0.12%
Squirrel	4.36%	3.41%	0.00%	0.00%
Unknown Cause	4.44%	5.77%	6.89%	8.86%
Deterioration	5.20%	3.86%	0.12%	0.23%
Scheduled	1.68%	4.31%	0.00%	0.00%
Power Supplier	11.98%	33.88%	19.37%	53.36%
Bird	0.04%	0.04%	0.00%	0.00%
Public Accident	7.65%	5.43%	7.28%	6.76%
Ice/Snow	28.14%	13.34%	62.76%	25.30%
Sag/Clearance	0.78%	1.42%	2.37%	4.43%
Tree - ROW	3.10%	2.73%	0.08%	0.12%
Lightning	19.90%	16.56%	1.00%	0.70%
Tree - Non ROW	8.12%	3.33%	0.08%	0.12%

Corrections to be made: Storm related outages, no corrections necessary at this time.

Substation Name and Number MILLERSBURG 124  
 Substation Location Miller Station Rd., Carlisle, KY 40311  
 Circuit Name and Number MILLERSBURG 124  
 Circuit Location Taylors Creek  
 Total Circuit Length (Miles) 34.3  
 2015 Member Count 367  
 Date of last Trim 4-2010

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	143.35	1.4389	217.32	2.3484
Equipment Fault	19.27%	16.21%	4.40%	5.92%
Wind	10.68%	3.86%	0.08%	0.12%
Small Animal	1.19%	1.97%	3.60%	5.57%
Squirrel	1.29%	2.39%	2.21%	2.44%
Unknown Cause	0.08%	0.15%	0.11%	0.23%
Deterioration	6.51%	7.04%	1.89%	3.60%
Scheduled	19.07%	13.26%	61.16%	33.53%
Power Supplier	10.70%	26.64%	18.74%	41.29%
Bird	0.01%	0.04%	0.00%	0.00%
Overload	0.27%	0.30%	0.00%	0.00%
Ice/Snow	0.50%	0.15%	1.63%	0.46%
Sag/Clearance	0.99%	4.51%	0.82%	1.04%
Tree - ROW	0.63%	0.87%	2.08%	2.67%
Lightning	0.32%	0.53%	0.32%	0.46%
Tree - Non ROW	17.73%	8.79%	2.96%	2.67%
Vandalism	10.77%	13.29%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number NICHOLASVILLE 104  
 Substation Location Bethany Rd., Nicholasville, KY 40356  
 Circuit Name and Number NICHOLASVILLE 104  
 Circuit Location Brittany Heights  
 Total Circuit Length (Miles) 8.0  
 2015 Member Count 478  
 Date of last Trim 6-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	17.35	0.3778	42.83	1.0983
Equipment Fault	1.98%	1.22%	2.00%	0.95%
Wind	7.56%	5.43%	0.00%	0.00%
Small Animal	15.33%	11.07%	20.01%	9.71%
Squirrel	0.73%	0.66%	0.00%	0.00%
Unknown Cause	0.85%	0.33%	0.00%	0.00%
Deterioration	2.40%	2.10%	1.13%	0.76%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	3.48%	2.21%	0.00%	0.00%
Overload	9.43%	14.62%	0.00%	0.00%
Lightning	44.87%	56.92%	76.86%	88.57%
Tree - Non ROW	13.35%	5.43%	0.00%	0.00%

Corrections to be made: Storm related outages, no corrections necessary at this time.

Substation Name and Number NICHOLASVILLE 114  
 Substation Location Bethany Rd., Nicholasville, KY 40356  
 Circuit Name and Number NICHOLASVILLE 114  
 Circuit Location McClane/Groggin's Ferry  
 Total Circuit Length (Miles) 19.9  
 2015 Member Count 230  
 Date of last Trim 3-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	31.88	0.5070	97.87	1.6652
Equipment Fault	8.25%	7.20%	1.30%	0.26%
Wind	1.47%	0.34%	0.00%	0.00%
Small Animal	33.56%	52.49%	49.47%	75.20%
Squirrel	2.80%	2.57%	0.00%	0.00%
Unknown Cause	7.80%	6.35%	1.42%	1.04%
Deterioration	0.17%	0.17%	0.00%	0.00%
Scheduled	1.52%	2.23%	0.00%	0.00%
Bird	1.83%	2.74%	0.00%	0.00%
Overload	0.53%	0.69%	0.86%	1.04%
Public Accident	5.53%	2.06%	0.00%	0.00%
Ice/Snow	2.16%	1.37%	3.52%	2.09%
Sag/Clearance	0.68%	0.86%	0.00%	0.00%
Tree - ROW	2.75%	2.92%	0.72%	0.26%
Lightning	9.53%	7.03%	10.28%	5.74%
Tree - Non ROW	21.42%	10.98%	32.44%	14.36%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number NICHOLASVILLE 124  
 Substation Location Bethany Rd., Nicholasville, KY 40356  
 Circuit Name and Number NICHOLASVILLE 124  
 Circuit Location Spears  
 Total Circuit Length (Miles) 27.7  
 2015 Member Count 368  
 Date of last Trim 9-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	79.00	0.6457	105.08	1.0870
Equipment Fault	4.19%	2.95%	10.38%	5.00%
Wind	0.42%	1.01%	0.00%	0.00%
Small Animal	7.34%	15.24%	19.99%	32.25%
Squirrel	0.41%	0.67%	0.00%	0.00%
Unknown Cause	5.45%	8.84%	0.21%	0.25%
Deterioration	0.20%	0.59%	0.00%	0.00%
Scheduled	0.26%	0.08%	0.96%	0.25%
Bird	1.31%	3.54%	0.00%	0.00%
Public Accident	0.59%	1.01%	0.28%	0.50%
Ice/Snow	0.78%	0.59%	2.93%	1.75%
Fire	0.18%	0.17%	0.67%	0.50%
Tree - ROW	10.90%	11.36%	2.96%	2.00%
Lightning	67.54%	53.70%	61.62%	57.50%
Tree - Non ROW	0.44%	0.25%	0.00%	0.00%

Corrections to be made: Storm related outages, no corrections necessary at this time.

1-144

Substation Name and Number NICHOLASVILLE 144  
Substation Location Bethany Rd., Nicholasville, KY 40356  
Circuit Name and Number NICHOLASVILLE 144  
Circuit Location The Country  
Total Circuit Length (Miles) 4.5  
2015 Member Count 24  
Date of last Trim 11-2014

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	43.56	0.5083	41.67	0.5417
Small Animal	2.39%	1.64%	0.00%	0.00%
Squirrel	18.79%	27.87%	12.80%	23.08%
Unknown Cause	1.01%	1.64%	0.00%	0.00%
Deterioration	5.57%	6.56%	11.40%	7.69%
Bird	28.77%	16.39%	35.10%	23.08%
Tree - ROW	10.64%	19.67%	6.40%	7.69%
Lightning	2.26%	1.64%	0.00%	0.00%
	30.57%	24.59%	34.30%	38.46%

Corrections to be made: Storm related outages, no corrections necessary at this time.

22-104

Substation Name and Number NINEVAH 104  
 Substation Location Clifton Rd., Lawrenceburg, KY 40342  
 Circuit Name and Number NINEVAH 104  
 Circuit Location Wild Cat/ Fox Creek Office  
 Total Circuit Length (Miles) 35.0  
 2015 Member Count 397  
 Date of last Trim 3-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	156.09	1.5561	231.46	2.5360
Wind	1.39%	1.59%	0.12%	0.10%
Small Animal	2.32%	1.20%	0.00%	0.00%
Squirrel	0.49%	1.00%	0.88%	1.59%
Unknown Cause	9.98%	14.86%	0.00%	0.00%
Deterioration	8.93%	18.78%	2.01%	2.78%
Scheduled	1.74%	2.07%	0.30%	0.40%
Power Supplier	1.59%	4.37%	3.22%	9.34%
Bird	45.97%	25.21%	63.37%	38.81%
Public Accident	0.60%	0.97%	0.00%	0.00%
Tree - ROW	0.38%	0.45%	1.30%	1.39%
Lightning	7.69%	5.44%	5.65%	4.07%
Tree - Non ROW	9.49%	14.76%	22.48%	40.13%
	9.42%	9.29%	0.69%	1.39%

Corrections to be made: Storm related outages, no corrections necessary at this time.

22-114

Substation Name and Number NINEVAH 114  
Substation Location Clifton Rd., Lawrenceburg, KY 40342  
Circuit Name and Number NINEVAH 114  
Circuit Location Walker Lane/Peach Tree  
Total Circuit Length (Miles) 13.0  
2015 Member Count 120  
Date of last Trim 12-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	21.79%	22.68%	0.00%	0.00%
Squirrel	0.24%	0.63%	0.00%	0.00%
Unknown Cause	6.82%	13.65%	0.00%	0.00%
Scheduled	0.22%	0.21%	0.58%	0.73%
Power Supplier	65.35%	50.01%	92.19%	86.78%
Bird	0.75%	2.10%	0.00%	0.00%
Tree - ROW	1.93%	6.30%	0.00%	0.00%
Lightning	2.89%	4.41%	7.23%	12.49%

Corrections to be made: Power supplier caused, no corrections necessary at this time.

Substation Name and Number NINEVAH 134  
 Substation Location Clifton Rd., Lawrenceburg, KY 40342  
 Circuit Name and Number NINEVAH 134  
 Circuit Location Lane's Mill/Dove Creek Estates  
 Total Circuit Length (Miles) 58.1  
 2015 Member Count 964  
 Date of last Trim 12-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	160.03	1.5388	291.08	1.8609
Equipment Fault	7.64%	18.90%	0.65%	1.34%
Wind	9.92%	2.41%	22.71%	7.53%
Small Animal	1.97%	3.36%	0.12%	0.50%
Squirrel	0.59%	1.12%	0.58%	1.34%
Unknown Cause	5.62%	8.60%	9.14%	15.94%
Deterioration	4.71%	3.67%	6.08%	5.63%
Scheduled	0.26%	1.90%	0.37%	3.07%
Power Supplier	45.28%	25.53%	50.39%	52.90%
Bird	0.19%	0.44%	0.02%	0.11%
Public Accident	5.65%	14.16%	0.07%	0.17%
Fire	0.01%	0.03%	0.00%	0.00%
Tree - ROW	3.88%	3.57%	0.87%	2.23%
Lightning	8.37%	10.15%	0.69%	1.11%
Tree - Non ROW	5.90%	6.13%	8.28%	8.14%
Large Animal	0.01%	0.01%	0.00%	0.00%

Corrections to be made: Power supplier caused, no corrections necessary at this time.

22-144

Substation Name and Number NINEVAH 144  
Substation Location Clifton Rd., Lawrenceburg, KY 40342  
Circuit Name and Number NINEVAH 144  
Circuit Location Clifton  
Total Circuit Length (Miles) 6.5  
2015 Member Count 49  
Date of last Trim 2-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	22.85%	14.47%	38.23%	19.74%
Squirrel	0.03%	0.15%	0.00%	0.00%
Unknown Cause	6.00%	14.63%	0.09%	0.40%
Deterioration	21.63%	14.47%	23.35%	19.74%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	19.76%	14.36%	17.84%	19.43%
Bird	1.47%	4.07%	0.00%	0.00%
Tree - ROW	9.39%	7.24%	0.00%	0.00%
Lightning	18.80%	30.46%	20.49%	40.69%
Tree - Non ROW	0.08%	0.15%	0.00%	0.00%

Corrections to be made: Power supplier caused, no corrections necessary at this time.

15-104

Substation Name and Number NORTH MADISON 104  
Substation Location Jacks Creek Pike, Richmond KY 40475  
Circuit Name and Number NORTH MADISON 104  
Circuit Location Shiloh Point  
Total Circuit Length (Miles) 12.0  
2015 Member Count 185  
Date of last Trim 8-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	46.63	0.5546	48.94	0.3081
Wind	52.21%	39.77%	42.79%	49.12%
Small Animal	11.89%	33.33%	0.00%	0.00%
Unknown Cause	3.56%	5.46%	0.00%	0.00%
Deterioration	0.22%	0.19%	0.00%	0.00%
Bird	19.22%	10.53%	54.28%	47.37%
Public Accident	0.70%	1.17%	0.00%	0.00%
Lightning	0.78%	1.17%	0.00%	0.00%
Tree - Non ROW	9.68%	7.60%	2.93%	3.51%
	1.74%	0.78%	0.00%	0.00%

Corrections to be made: No corrective action planned at this time.

40-104

Substation Name and Number OXFORD 104  
Substation Location Cynthiana Rd, Georgetown KY 40324  
Circuit Name and Number OXFORD 104  
Circuit Location Carrick Pike  
Total Circuit Length (Miles) 37.4  
2015 Member Count 306  
Date of last Trim 6-2014

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	164.95	1.2914	466.45	2.5026
Wind	48.80%	22.67%	71.71%	42.44%
Small Animal	0.40%	0.20%	0.00%	0.00%
Squirrel	0.36%	0.76%	0.09%	0.26%
Squirrel	0.25%	0.40%	0.00%	0.00%
Unknown Cause	0.63%	1.47%	0.61%	2.48%
Deterioration	6.67%	13.72%	0.00%	0.00%
Scheduled	0.81%	2.99%	0.00%	0.00%
Power Supplier	16.42%	29.25%	16.02%	39.80%
Bird	0.14%	0.30%	0.00%	0.00%
Public Accident	0.66%	0.81%	0.00%	0.00%
Tree - ROW	4.15%	5.72%	5.16%	7.57%
Lightning	17.08%	18.62%	0.00%	0.00%
Tree - Non ROW	3.63%	2.88%	6.42%	7.44%
Large Animal	0.01%	0.20%	0.00%	0.00%

Corrections to be made: Equipment repaired at time of outage, no corrections necessary at this time.

40-114

Substation Name and Number OXFORD 114  
 Substation Location Cynthiana Rd, Georgetown KY 40324  
 Circuit Name and Number OXFORD 114  
 Circuit Location Finnell Pike  
 Total Circuit Length (Miles) 17.8  
 2015 Member Count 166  
 Date of last Trim 5-2014

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	95.63	1.2729	96.62	1.3394
Equipment Fault	17.61%	10.13%	2.46%	0.90%
Small Animal	1.11%	1.89%	0.47%	0.45%
Squirrel	1.37%	1.80%	3.43%	4.50%
Unknown Cause	2.76%	3.69%	6.07%	8.10%
Deterioration	16.22%	8.99%	0.00%	0.00%
Scheduled	4.46%	15.24%	0.00%	0.00%
Power Supplier	28.32%	29.67%	77.32%	74.36%
Bird	1.65%	1.89%	0.00%	0.00%
Overload	0.08%	0.09%	0.41%	0.45%
Public Accident	10.33%	16.28%	0.00%	0.00%
Ice/Snow	1.61%	2.27%	7.94%	10.79%
Tree - ROW	1.96%	0.85%	0.00%	0.00%
Lightning	7.07%	4.83%	0.00%	0.00%
Tree - Non ROW	5.45%	2.37%	1.90%	0.45%

Corrections to be made: No corrections necessary at this time.

40-124

Substation Name and Number OXFORD 124  
Substation Location Cynthiana Rd, Georgetown KY 40324  
Circuit Name and Number OXFORD 124  
Circuit Location Cherry Blossom,  
Total Circuit Length (Miles) 26.7  
2015 Member Count 282  
Date of last Trim 5-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	0.63%	0.16%	0.00%	0.00%
Small Animal	0.80%	0.65%	0.00%	0.00%
Squirrel	0.30%	0.32%	0.20%	0.30%
Unknown Cause	6.89%	7.14%	10.49%	13.26%
Scheduled	0.24%	1.46%	0.00%	0.00%
Power Supplier	83.97%	86.38%	86.41%	84.63%
Bird	0.25%	0.16%	0.00%	0.00%
Public Accident	0.29%	0.32%	0.00%	0.00%
Ice/Snow	1.91%	0.97%	2.90%	1.81%
Lightning	3.66%	2.27%	0.00%	0.00%
Tree - Non ROW	1.07%	0.16%	0.00%	0.00%

Corrections to be made: Power supplier caused, no corrections necessary at this time.

28-114

Substation Name and Number POWELL TAYLOR 114  
Substation Location 1024 Powell Taylor Rd., Lawrenceburg, KY 40342  
Circuit Name and Number POWELL TAYLOR 114  
Circuit Location Birdie Rd  
Total Circuit Length (Miles) 47.9  
2015 Member Count 366  
Date of last Trim 12-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	154.32	1.4802	249.84	1.8251
Wind	27.24%	15.47%	8.34%	7.63%
Small Animal	1.47%	1.88%	4.06%	7.04%
Squirrel	0.94%	1.96%	0.35%	1.05%
Unknown Cause	0.53%	1.00%	0.00%	0.00%
Deterioration	3.66%	6.09%	0.70%	1.95%
Scheduled	2.90%	3.65%	0.11%	0.30%
Power Supplier	0.09%	0.07%	0.00%	0.00%
Bird	1.51%	12.14%	0.00%	0.00%
Public Accident	0.01%	0.04%	0.00%	0.00%
Ice/Snow	2.69%	2.88%	2.03%	3.89%
Tree - ROW	1.78%	1.55%	0.00%	0.00%
Lightning	1.26%	1.48%	3.84%	5.84%
Tree - Non ROW	13.34%	16.10%	7.23%	6.44%
	42.57%	35.70%	73.34%	65.87%

Corrections to be made: Out of ROW trees cleared at time of outages, no corrections necessary.

Substation Name and Number POWELL TAYLOR 134  
 Substation Location 1024 Powell Taylor Rd., Lawrenceburg, KY 40342  
 Circuit Name and Number POWELL TAYLOR 134  
 Circuit Location Wal-Mart/Briar Creek  
 Total Circuit Length (Miles) 9.7  
 2015 Member Count 308  
 Date of last Trim 9-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	38.83	0.5031	85.32	0.4740
Equipment Fault	11.81%	8.39%	0.00%	0.00%
Wind	9.63%	5.81%	0.00%	0.00%
Small Animal	1.54%	4.39%	0.00%	0.00%
Squirrel	9.46%	10.20%	2.42%	8.22%
Unknown Cause	0.40%	0.77%	0.39%	1.37%
Deterioration	2.27%	6.07%	4.33%	18.49%
Scheduled	6.73%	9.04%	0.00%	0.00%
Power Supplier	6.02%	35.72%	0.00%	0.00%
Bird	1.02%	1.55%	0.00%	0.00%
Public Accident	0.28%	0.26%	0.00%	0.00%
Sag/Clearance	0.22%	0.26%	0.00%	0.00%
Tree - ROW	4.14%	0.77%	0.00%	0.00%
Lightning	11.69%	4.26%	14.25%	8.22%
Tree - Non ROW	34.36%	11.36%	77.66%	57.53%
Contractor	0.42%	1.16%	0.96%	6.16%

Corrections to be made: Out of ROW tree cleared at time of outage, no corrections necessary.

28-144

Substation Name and Number POWELL TAYLOR 144  
Substation Location 1024 Powell Taylor Rd., Lawrenceburg, KY 40342  
Circuit Name and Number POWELL TAYLOR 144  
Circuit Location Powell Taylor/Glenn View  
Total Circuit Length (Miles) 9.7  
2015 Member Count 181  
Date of last Trim 1-2012

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	39.67	0.6515	73.34	1.3536
Wind	10.33%	5.09%	22.14%	4.49%
Small Animal	14.22%	1.70%	0.00%	0.00%
Squirrel	3.00%	2.88%	7.38%	5.71%
Unknown Cause	2.80%	3.73%	1.30%	1.63%
Deterioration	5.70%	6.11%	9.83%	6.94%
Power Supplier	5.12%	4.75%	0.00%	0.00%
Bird	5.89%	27.58%	0.00%	0.00%
Public Accident	1.25%	1.70%	0.00%	0.00%
Tree - ROW	18.55%	30.53%	50.17%	73.47%
Lightning	19.75%	8.65%	0.00%	0.00%
Tree - Non ROW	7.93%	6.78%	9.18%	7.76%
	5.46%	0.51%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number SINAI 104  
 Substation Location Hwy 62, Lawrenceburg, KY 40342  
 Circuit Name and Number SINAI 104  
 Circuit Location Buntain School Rd/Birdie  
 Total Circuit Length (Miles) 26.7  
 2015 Member Count 202  
 Date of last Trim 1-2012

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	164.83	1.9876	242.26	2.5673
Equipment Fault	10.62%	6.87%	0.00%	0.00%
Wind	1.07%	0.85%	0.34%	0.19%
Small Animal	0.93%	1.59%	2.11%	4.24%
Squirrel	0.10%	0.15%	0.00%	0.00%
Unknown Cause	13.27%	11.21%	5.32%	9.06%
Deterioration	5.32%	4.13%	0.00%	0.00%
Scheduled	0.59%	0.65%	1.84%	1.35%
Power Supplier	51.71%	58.95%	84.68%	79.56%
Bird	1.61%	1.94%	0.00%	0.00%
Public Accident	0.03%	0.05%	0.00%	0.00%
Tree - ROW	0.27%	0.20%	0.92%	0.77%
Lightning	11.33%	8.82%	4.60%	4.24%
Tree - Non ROW	3.08%	4.43%	0.00%	0.00%
Large Animal	0.06%	0.15%	0.20%	0.58%

Corrections to be made: Power supplier outage, no corrections necessary at this time.

Substation Name and Number SINAI 144  
 Substation Location Hwy 62, Lawrenceburg, KY 40342  
 Circuit Name and Number SINAI 144  
 Circuit Location Glensboro  
 Total Circuit Length (Miles) 51.1  
 2015 Member Count 358  
 Date of last Trim 3-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	230.97	2.3639	285.42	3.2967
Equipment Fault	0.82%	0.52%	0.15%	0.08%
Wind	19.55%	6.74%	8.78%	5.17%
Small Animal	0.21%	0.38%	0.18%	0.34%
Squirrel	0.59%	1.25%	0.23%	0.34%
Unknown Cause	11.41%	20.62%	0.16%	0.25%
Deterioration	1.52%	2.17%	0.22%	0.34%
Scheduled	0.07%	0.92%	0.00%	0.00%
Power Supplier	23.86%	25.33%	71.88%	61.96%
Bird	1.22%	1.11%	0.00%	0.00%
Overload	0.01%	0.02%	0.00%	0.00%
Public Accident	1.27%	2.36%	0.00%	0.00%
Ice/Snow	0.42%	0.17%	0.00%	0.00%
Tree - ROW	10.95%	10.04%	0.00%	0.00%
Lightning	12.66%	15.24%	2.53%	1.02%
Tree - Non ROW	15.45%	13.12%	15.86%	30.50%

Corrections to be made: Power supplier outage, no corrections necessary at this time.

Substation Name and Number SINAI 124  
 Substation Location Hwy 62, Lawrenceburg, KY 40342  
 Circuit Name and Number SINAI 124  
 Circuit Location W Anderson/ Lick Skillet  
 Total Circuit Length (Miles) 45.7  
 2015 Member Count 336  
 Date of last Trim 5-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	239.59	2.4668	239.25	2.5009
Equipment Fault	2.87%	2.46%	0.00%	0.00%
Wind	27.08%	19.86%	0.00%	0.00%
Small Animal	1.67%	2.39%	7.40%	10.23%
Squirrel	0.84%	1.21%	0.19%	0.24%
Unknown Cause	4.75%	13.97%	0.13%	0.24%
Deterioration	1.31%	1.52%	1.57%	2.38%
Scheduled	2.65%	8.40%	2.77%	2.50%
Power Supplier	30.70%	39.43%	85.75%	81.67%
Bird	0.01%	0.02%	0.07%	0.12%
Overload	0.04%	0.07%	0.22%	0.36%
Public Accident	0.76%	0.65%	0.00%	0.00%
Tree - ROW	1.04%	1.01%	0.00%	0.00%
Lightning	26.09%	8.71%	1.85%	2.14%
Tree - Non ROW	0.20%	0.29%	0.04%	0.12%

Corrections to be made: Power supplier outage, no corrections necessary at this time.

Substation Name and Number SINAI 134  
 Substation Location Hwy 62, Lawrenceburg, KY 40342  
 Circuit Name and Number SINAI 134  
 Circuit Location Ashby Rd  
 Total Circuit Length (Miles) 60.0  
 2015 Member Count 461  
 Date of last Trim 4-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	222.70	2.1472	568.82	4.1098
Equipment Fault	19.08%	9.88%	35.16%	21.06%
Wind	9.12%	9.11%	0.00%	0.00%
Small Animal	0.40%	0.79%	0.11%	0.21%
Squirrel	0.15%	0.26%	0.11%	0.21%
Unknown Cause	5.67%	7.35%	1.36%	1.95%
Deterioration	0.29%	0.30%	0.07%	0.11%
Scheduled	0.11%	0.10%	0.00%	0.00%
Power Supplier	33.02%	45.31%	36.07%	49.70%
Bird	0.40%	0.53%	0.00%	0.00%
Public Accident	0.05%	0.04%	0.00%	0.00%
Ice/Snow	4.96%	1.62%	4.26%	2.27%
Fire	0.01%	0.02%	0.03%	0.05%
Sag/Clearance	0.03%	0.04%	0.00%	0.00%
Tree - ROW	0.03%	0.06%	0.00%	0.00%
Lightning	12.64%	11.03%	10.43%	4.54%
Tree - Non ROW	14.03%	13.56%	12.40%	19.90%

Corrections to be made: Power supplier outage, no corrections necessary at this time.

23-144

Substation Name and Number SINAI 144  
 Substation Location Hwy 62, Lawrenceburg, KY 40342  
 Circuit Name and Number SINAI 144  
 Circuit Location Glensboro  
 Total Circuit Length (Miles) 51.1  
 2015 Member Count 358  
 Date of last Trim 3-2013

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	230.97	2.3639	285.42	3.2967
Equipment Fault	0.82%	0.52%	0.15%	0.08%
Wind	19.55%	6.74%	8.78%	5.17%
Small Animal	0.21%	0.38%	0.18%	0.34%
Squirrel	0.59%	1.25%	0.23%	0.34%
Unknown Cause	11.41%	20.62%	0.16%	0.25%
Deterioration	1.52%	2.17%	0.22%	0.34%
Scheduled	0.07%	0.92%	0.00%	0.00%
Power Supplier	23.86%	25.33%	71.88%	61.96%
Bird	1.22%	1.11%	0.00%	0.00%
Overload	0.01%	0.02%	0.00%	0.00%
Public Accident	1.27%	2.36%	0.00%	0.00%
Ice/Snow	0.42%	0.17%	0.00%	0.00%
Tree - ROW	10.95%	10.04%	0.00%	0.00%
Lightning	12.66%	15.24%	2.53%	1.02%
Tree - Non ROW	15.45%	13.12%	15.86%	30.50%

Corrections to be made: Power supplier outage, no corrections necessary at this time.

12-104

Substation Name and Number SOUTH ELKHORN 104  
Substation Location 3251 Keene Rd., Nicholasville, KY 40356  
Circuit Name and Number SOUTH ELKHORN 104  
Circuit Location Firebrook/Dogwood Trace  
Total Circuit Length (Miles) 22.0  
2015 Member Count 1083  
Date of last Trim 1-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	13.66	0.3309	21.72	0.9972
Equipment Fault	48.16%	66.29%	97.84%	99.35%
Small Animal	1.11%	1.34%	0.00%	0.00%
Squirrel	0.14%	0.11%	0.00%	0.00%
Unknown Cause	2.23%	1.23%	0.00%	0.00%
Deterioration	3.19%	2.01%	2.16%	0.65%
Scheduled	0.74%	0.84%	0.00%	0.00%
Bird	7.48%	5.69%	0.00%	0.00%
Ice/Snow	1.82%	1.06%	0.00%	0.00%
Tree - ROW	5.49%	3.46%	0.00%	0.00%
Lightning	29.64%	17.97%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

12-114

Substation Name and Number SOUTH ELKHORN 114  
Substation Location 3251 Keene Rd., Nicholasville, KY 40356  
Circuit Name and Number SOUTH ELKHORN 114  
Circuit Location Bellarive & Equestrian Woods  
Total Circuit Length (Miles) 17.9  
2015 Member Count 419  
Date of last Trim 5-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	72.56	0.9990	157.56	2.0931
Equipment Fault	20.50%	18.39%	0.00%	0.00%
Wind	0.27%	0.10%	0.00%	0.00%
Small Animal	24.77%	20.07%	56.77%	47.55%
Squirrel	0.39%	0.53%	0.00%	0.00%
Unknown Cause	28.68%	35.64%	0.70%	0.80%
Deterioration	4.36%	1.24%	0.00%	0.00%
Bird	15.71%	20.02%	36.18%	47.78%
Overload	0.08%	0.10%	0.00%	0.00%
Tree - ROW	0.73%	1.15%	0.00%	0.00%
Tree - Non ROW	2.76%	1.62%	6.36%	3.88%
Contractor	1.74%	1.15%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

14-104

Substation Name and Number SOUTH JESSAMINE 104  
Substation Location 1307 Chrisman Mill Rd., Nicholasville, KY 40356  
Circuit Name and Number SOUTH JESSAMINE 104  
Circuit Location John Watt's Drive  
Total Circuit Length (Miles) 4.7  
2015 Member Count 20  
Date of last Trim 4-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	4.22	0.0400	3.25	0.0500
Equipment Fault	56.40%	50.00%	0.00%	0.00%
Overload	15.40%	25.00%	100.00%	100.00%
Lightning	28.20%	25.00%	0.00%	0.00%

Corrections to be made: No corrections necessary at this time.

14-114

Substation Name and Number SOUTH JESSAMINE 114  
Substation Location 1307 Chrisman Mill Rd., Nicholasville, KY 40356  
Circuit Name and Number SOUTH JESSAMINE 114  
Circuit Location Locust Heights/Southbrook  
Total Circuit Length (Miles) 23.4  
2015 Member Count 804  
Date of last Trim 3-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>34.18</b>	<b>0.3888</b>	<b>27.39</b>	<b>0.5087</b>
Equipment Fault	5.76%	8.19%	25.50%	27.38%
Small Animal	3.13%	6.08%	9.21%	10.51%
Squirrel	1.17%	1.47%	6.77%	5.13%
Unknown Cause	5.35%	11.32%	0.00%	0.00%
Deterioration	1.56%	1.47%	0.60%	0.24%
Scheduled	0.24%	0.70%	1.19%	2.20%
Bird	3.86%	7.49%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	6.58%	12.09%	37.58%	44.50%
Sag/Clearance	68.86%	47.66%	0.00%	0.00%
Lightning	3.49%	3.52%	19.15%	10.02%

Corrections to be made: No corrections necessary at this time.

14-134

Substation Name and Number SOUTH JESSAMINE 134  
 Substation Location 1307 Chrisman Mill Rd., Nicholasville, KY 40356  
 Circuit Name and Number SOUTH JESSAMINE 134  
 Circuit Location Chrisman Mill  
 Total Circuit Length (Miles) 109.8  
 2015 Member Count 856  
 Date of last Trim 1-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	98.14	1.2558	151.45	0.9369
Equipment Fault	3.06%	2.62%	2.11%	4.36%
Wind	0.09%	0.07%	0.00%	0.00%
Small Animal	1.53%	1.88%	1.58%	5.11%
Squirrel	1.88%	1.36%	5.42%	6.11%
Unknown Cause	15.70%	22.70%	8.39%	12.72%
Deterioration	3.61%	1.58%	4.84%	4.61%
Scheduled	0.96%	14.62%	0.10%	0.12%
Bird	2.48%	4.04%	0.00%	0.00%
Public Accident	42.59%	22.85%	64.20%	44.14%
Ice/Snow	0.95%	0.61%	3.09%	4.11%
Tree - ROW	1.84%	0.76%	0.29%	0.50%
Lightning	21.10%	24.50%	7.69%	15.46%
Tree - Non ROW	4.21%	2.40%	2.29%	2.74%

Corrections to be made: No corrections necessary at this time.

14-144

Substation Name and Number SOUTH JESSAMINE 144  
Substation Location 1307 Chrisman Mill Rd., Nicholasville, KY 40356  
Circuit Name and Number SOUTH JESSAMINE 144  
Circuit Location Industrial Park  
Total Circuit Length (Miles) 4.4  
2015 Member Count 26  
Date of last Trim 2-2011

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Squirrel	30.70%	33.33%	0.00%	0.00%
Scheduled	11.40%	33.33%	0.00%	0.00%
Lightning	57.89%	33.33%	100.00%	100.00%

Corrections to be made: Storm related outages, no corrections necessary at this time.

Substation Name and Number VAN\_ARSDHELL 134  
 Substation Location 104 Bardstown Rd., Harrodsburg, KY 40330  
 Circuit Name and Number VAN\_ARSDHELL 134  
 Circuit Location Cornishville/Bushtown  
 Total Circuit Length (Miles) 86.8  
 2015 Member Count 449  
 Date of last Trim 5-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Equipment Fault	439.79	3.6858	761.04	3.5635
Wind	22.84%	15.02%	58.68%	55.38%
Small Animal	1.27%	0.59%	0.00%	0.00%
Squirrel	12.76%	5.95%	1.24%	3.63%
Unknown Cause	1.58%	2.60%	1.75%	3.63%
Deterioration	2.45%	3.75%	0.39%	1.06%
Scheduled	2.68%	2.62%	0.06%	0.19%
Power Supplier	1.12%	4.00%	0.10%	0.31%
Bird	14.66%	28.72%	0.00%	0.00%
Overload	0.37%	0.80%	0.00%	0.00%
Public Accident	0.01%	0.01%	0.00%	0.00%
Tree - ROW	3.18%	4.37%	0.00%	0.00%
Lightning	0.65%	0.94%	1.30%	3.31%
Tree - Non ROW	33.72%	28.18%	36.47%	32.44%
Large Animal	2.69%	2.43%	0.00%	0.00%
	0.01%	0.01%	0.02%	0.06%

Corrections to be made: Storm related outages, no corrections necessary at this time.

Substation Name and Number VAN\_ARSDHELL 144  
 Substation Location 104 Bardstown Rd., Harrodsburg, KY 40330  
 Circuit Name and Number VAN\_ARSDHELL 144  
 Circuit Location Kirkwood  
 Total Circuit Length (Miles) 70.9  
 2015 Member Count 604  
 Date of last Trim 3-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	65.99	0.5752	181.09	1.1242
Equipment Fault	41.96%	25.73%	76.46%	65.83%
Small Animal	1.18%	2.59%	2.15%	6.63%
Squirrel	0.04%	0.12%	0.07%	0.29%
Unknown Cause	2.22%	3.05%	4.04%	7.81%
Deterioration	0.29%	0.81%	0.53%	2.06%
Power Supplier	45.12%	60.91%	0.00%	0.00%
Overload	0.02%	0.06%	0.03%	0.15%
Public Accident	0.38%	0.40%	0.68%	1.03%
Ice/Snow	0.22%	0.12%	0.41%	0.29%
Tree - ROW	1.94%	3.22%	3.53%	8.25%
Lightning	1.16%	1.15%	2.11%	2.95%
Tree - Non ROW	5.48%	1.84%	9.98%	4.71%

Corrections to be made: Equipment repaired at time of outage, no corrections necessary at this time.

Substation Name and Number WEST BERE A 124  
 Substation Location 5350 Walnutmeadow Rd., Berea, KY 40403  
 Circuit Name and Number WEST BERE A 124  
 Circuit Location Peggy Flats  
 Total Circuit Length (Miles) 44.3  
 2015 Member Count 734  
 Date of last Trim 7-2014

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	158.29	1.2313	316.03	1.8965
Equipment Fault	0.43%	0.51%	0.00%	0.00%
Wind	1.05%	1.26%	1.38%	1.58%
Small Animal	2.58%	5.80%	1.33%	4.45%
Squirrel	0.33%	0.95%	0.46%	1.44%
Unknown Cause	2.24%	4.67%	1.04%	2.51%
Deterioration	1.41%	1.50%	0.00%	0.00%
Scheduled	0.39%	1.13%	0.37%	0.14%
Power Supplier	9.43%	15.53%	0.00%	0.00%
Bird	0.53%	1.33%	0.03%	0.07%
Overload	0.02%	0.04%	0.00%	0.00%
Public Accident	54.42%	40.89%	90.56%	81.68%
Tree - ROW	1.68%	2.46%	1.61%	3.09%
Lightning	25.03%	23.08%	3.20%	4.96%
Tree - Non ROW	0.48%	0.84%	0.03%	0.07%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number WEST BERE A 144  
 Substation Location 5350 Walnutmeadow Rd., Berea, KY 40403  
 Circuit Name and Number WEST BERE A 144  
 Circuit Location Walnut Meadow  
 Total Circuit Length (Miles) 46.5  
 2015 Member Count 239  
 Date of last Trim 9-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	101.64	1.0377	176.85	1.3975
Equipment Fault	30.24%	27.42%	74.47%	71.86%
Wind	4.97%	3.23%	1.06%	1.20%
Small Animal	6.13%	8.79%	7.76%	12.28%
Unknown Cause	10.77%	11.85%	0.00%	0.00%
Deterioration	17.06%	15.89%	6.41%	6.89%
Scheduled	0.41%	0.48%	0.00%	0.00%
Power Supplier	14.71%	18.47%	0.00%	0.00%
Bird	1.25%	1.85%	0.00%	0.00%
Public Accident	0.35%	0.48%	0.00%	0.00%
Sag/Clearance	2.53%	1.77%	0.00%	0.00%
Tree - ROW	1.95%	1.53%	0.00%	0.00%
Lightning	7.25%	6.37%	6.88%	5.99%
Tree - Non ROW	2.39%	1.85%	3.42%	1.80%

Corrections to be made: Equipment repaired at time of outage, no corrections necessary at this time.

Substation Name and Number WEST NICHOLASVILLE 124  
 Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356  
 Circuit Name and Number WEST NICHOLASVILLE 124  
 Circuit Location Shun Pike  
 Total Circuit Length (Miles) 46.1  
 2015 Member Count 407  
 Date of last Trim 4-2015

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	53.16	0.4904	116.59	0.8747
Equipment Fault	7.02%	9.92%	0.33%	0.28%
Wind	2.58%	1.70%	0.00%	0.00%
Small Animal	1.05%	2.00%	0.47%	1.12%
Unknown Cause	6.82%	10.02%	1.32%	3.09%
Deterioration	0.59%	1.50%	0.00%	0.00%
Scheduled	0.89%	1.30%	0.00%	0.00%
Bird	9.34%	13.73%	0.00%	0.00%
Public Accident	22.72%	15.23%	51.80%	42.70%
Ice/Snow	10.89%	9.52%	24.83%	26.69%
Fire	0.44%	0.80%	0.73%	0.84%
Sag/Clearance	0.10%	0.20%	0.00%	0.00%
Tree - ROW	16.63%	13.53%	0.49%	0.84%
Lightning	16.56%	14.33%	10.63%	7.87%
Tree - Non ROW	4.37%	6.21%	9.41%	16.57%

Corrections to be made: No corrections necessary at this time.

Substation Name and Number WEST NICHOLASVILLE 134  
 Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356  
 Circuit Name and Number WEST NICHOLASVILLE 134  
 Circuit Location Lone Oak/Clear Creek  
 Total Circuit Length (Miles) 46.6  
 2015 Member Count 995  
 Date of last Trim 3-2013

Total Minutes/Frequency	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
	77.89	1.1130	108.46	0.9246
Equipment Fault	25.05%	15.26%	71.91%	64.24%
Wind	26.33%	16.62%	0.00%	0.00%
Small Animal	1.27%	1.41%	3.52%	5.76%
Squirrel	0.08%	0.13%	0.00%	0.00%
Unknown Cause	8.15%	18.49%	0.67%	1.52%
Deterioration	0.16%	0.33%	0.00%	0.00%
Scheduled	0.16%	0.22%	0.00%	0.00%
Power Supplier	20.37%	32.42%	0.00%	0.00%
Bird	2.36%	3.29%	0.00%	0.00%
Overload	1.50%	1.91%	5.00%	10.87%
Public Accident	3.72%	2.04%	0.43%	0.87%
Tree - ROW	5.47%	4.01%	5.91%	5.22%
Lightning	1.88%	1.93%	0.52%	0.98%
Tree - Non ROW	3.48%	1.95%	12.03%	10.54%

Corrections to be made: Equipment repaired at time of outage, no corrections necessary at this time.

Substation Name and Number WEST NICHOLASVILLE 144  
 Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356  
 Circuit Name and Number WEST NICHOLASVILLE 144  
 Circuit Location Keeneland/Paddock  
 Total Circuit Length (Miles) 15.3  
 2015 Member Count 596  
 Date of last Trim 12-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	109.72	1.4453	235.84	3.0889
Equipment Fault	32.10%	28.33%	0.42%	0.33%
Small Animal	2.39%	2.90%	3.43%	4.56%
Squirrel	1.70%	2.39%	0.99%	0.60%
Unknown Cause	11.35%	14.42%	23.70%	30.80%
Deterioration	0.78%	0.84%	0.18%	1.25%
Bird	0.95%	2.16%	0.00%	0.00%
Overload	0.09%	0.19%	0.00%	0.00%
Public Accident	0.05%	0.05%	0.00%	0.00%
Tree - ROW	0.98%	1.23%	0.40%	0.49%
Lightning	32.00%	27.54%	70.88%	61.98%
Tree - Non ROW	17.62%	19.97%	0.00%	0.00%

Corrections to be made: Storm related outages, no corrections necessary at this time.

18-214

Substation Name and Number WEST NICHOLASVILLE 2 214  
Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356  
Circuit Name and Number WEST NICHOLASVILLE 2 214  
Circuit Location Bell Place/Keene Crossing  
Total Circuit Length (Miles) 11.5  
2015 Member Count 667  
Date of last Trim 12-2015

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	4.17	0.0657	19.48	0.2969
Equipment Fault	77.37%	71.23%	82.79%	78.79%
Squirrel	6.55%	9.59%	0.00%	0.00%
Unknown Cause	12.71%	15.53%	13.61%	17.17%
Lightning	3.37%	3.65%	3.60%	4.04%

Corrections to be made: Equipment repaired at time of outage, no corrections necessary at this time.

18-234

Substation Name and Number WEST NICHOLASVILLE 2 234  
Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356  
Circuit Name and Number WEST NICHOLASVILLE 2 234  
Circuit Location Donaldson/Adcom/Etter Dr  
Total Circuit Length (Miles) 2.1  
2015 Member Count 48  
Date of last Trim 2-2011

	5 Year Average		2015	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	0.20	0.0042	1.02	0.0208
Small Animal	100.00%	100.00%	100.00%	100.00%

Corrections to be made: No corrections necessary at this time.



# **DISTRIBUTION RIGHT-OF-WAY VEGETATION MANAGEMENT 2016 PLAN/ 2015 PLAN REVIEW**

**April 2016**

# Blue Grass Energy Vegetation Management Plan

## 2015 Review of Plan Implementation

Blue Grass Energy developed a formal plan to manage the maintenance of vegetation on distribution rights-of-way (ROW) in 2007/2008. The plans goals were established to provide excellent member service, maintain current tree related reliability, and look for opportunities to increase production and reduce program cost. These plans were continued and improved into 2015.

As stated in the previously submitted Vegetation Management Plan, the plan may be modified from time-to-time based on performance as measured by tree-related service reliability and evaluations of member satisfaction with service reliability. Specific reliability metrics may include Tree SAIFI, trends in customer minutes interrupted by tree-related causes and tree-caused primary interruptions per 100 line miles as internal benchmarks of program performance over time. A Tree-Caused Outage Report summarizes these reliability criteria and is regularly reviewed and monitored daily. Upon reporting of tree related outages a field investigation is conducted to determine the root cause.

## 2013-2016 Vegetation Management Strategy

### SCHEDULED MAINTENANCE AND CLEARANCE

Blue Grass Energy provides electric service to over 55,000 members through a network of over 4,700 miles of distribution line. Blue Grass Energy uses a cyclic approach to preventive vegetation management of its electric distribution ROW. Different circuits or portions of circuits may be scheduled on different cycles based on site conditions, sensitivity of the line to interruptions caused by trees or criticality of the line. The maintenance cycle for tree removal, tree pruning or brush control may be the same or different for a given scheduling unit. Following pruning and clearance operations, herbicide application is conducted after one full growing season.

As illustrated in Table 1, Blue Grass Energy completed 22 distribution circuits scheduled in 2015 for a total of 712 miles of distribution line (mileage was reduced by 6 miles due to conversion work). In 2016, there are 27 distribution circuits, for a total of 796 miles scheduled for completion. The varying site conditions determine the cost and cause completed miles to vary by year.

**Table 1. Blue Grass Energy R/W Miles Scheduled vs. Completed - Trimming**

Maintenance Year	2013	2014	2015	2016
Scheduled	908	777	718	796
Completed	901	777	712	TBD

Of the 2014 maintenance year mileage, 7 circuits consisting of 591 miles were identified for selective herbicide application and completed in 2015. Herbicide application of 9 circuits consisting of 591 miles from the 2015 maintenance year will be completed in 2016.

**Table 2. Blue Grass Energy R/W Miles Scheduled vs. Completed - Herbicide**

Maintenance Year - Herbicide	2014	2015	2016
Scheduled	533	591	591
Completed	533	591	TBD

## RELIABILITY

In 2008, Blue Grass Energy developed and implemented an outage investigation process to better understand the cause of tree failures. The data was again used in 2015 to identify species failure rates and help plan future scheduled and non scheduled work to eliminate potential outages. The investigation of all tree related outages will continue through 2015 to collect data on major outage categories.

Historical Blue Grass Energy tree caused outages within the right of way are illustrated in Table 3.

**Table 3. Number of Tree-Caused Outages within the ROW on the Blue Grass Energy System†**

Year	2011	2012	2013	2014	2015
<b>TOTALS</b>	<b>68</b>	<b>67</b>	<b>65</b>	<b>91</b>	<b>77</b>

†Outages on primary conductor excluding major event days

## 2015 VEGETATION MANAGEMENT PLAN REVIEW

Changes were implemented in 2015 to improve the ROW management plan. The “Distribution Right-Of-Way Vegetation Management Plan” submitted March 2015 reiterated in detail the processes that were built into the plan.

In 2015, all scheduled mileage was completed within the 2015 calendar year.

Listed below are some of the processes used in 2015:

1. Continuation of Formal Contractor Evaluation Program. Each contractor will be rated on nine qualitative categories such as customer complaints, quarterly mileage goals, exceptions/ omissions, quality/standards, tools/equipment, unscheduled interruptions/OSHA LWD, contractor cooperation & communication, crew professionalism, and data accuracy.
2. Yearly Revision of formal program policies and procedures and assurance of consistent implementation throughout the system to include additional detailed requirements.
3. Continued yearly revision of a general 5-6 year maintenance cycle for the system based on collected field data. In areas where standard clearances cannot be consistently achieved (e.g., subdivisions), mid cycle assessments will be conducted and cycles adjusted based on those findings. Recommended cycle lengths are guidelines.

4. ISA Certified Arborist Utility Specialist supervisory personnel have adequate utility vegetation management technical expertise and a qualified ISA Certified Assistant Arborist is on staff.
5. Selective use of herbicides to control resprouting from the stumps of removed deciduous trees.
6. Continuation of formal herbicide spray program to control woody species following maintenance pruning.
7. Written notification of property owners of the intent to prune trees and requirement of written permission for "yard" tree removals. We always strive to not allow property owners to influence pruning clearances.
8. The crew labor and equipment complements were adjusted throughout the year to maximize cost effectiveness.
9. Revised and improved the formal work monitoring and completion process. Each circuit is individually and 100 percent audited by ROW supervisory personnel to ensure specifications for clearance and quality are achieved.
10. Records were maintained of key aspects of the ROW vegetation management program to document program performance. This data provides information necessary for ongoing program management and circuit scheduling.
11. Meet requirements for Arbor Day Foundation Tree Line USA certification.

#### **2016 VEGETATION MANAGEMENT PLAN**

In addition to continuing the Distribution Right-Of-Way Vegetation Management Plans outlined for 2015 we intend to utilize the following key objectives in the upcoming year:

- Continue Formal Crew Field Audit Evaluation process, at the 100 percent level
- Continue to Uphold National Arbor Day Tree Line USA standards
- Continue to uphold ANSI A300 pruning and Z133 safety standards
- Utilization of vegetation management Best Management Practices as defined by the International Society of Arboriculture.
- Continue to evaluate and increase production and quality with established work force.
- Further inspection and reduction of unnecessary reactive maintenance
- Utilize multiple ROW vegetation maintenance contractors
- Continue with formal herbicide spray program to control woody species following maintenance pruning.

# Appendix

## ROW VEGETATION MAINTENANCE CLEARANCE CYCLE SCHEDULING STRATEGY

The following table summarizes the Blue Grass Energy ROW vegetation maintenance scheduling strategy. Individual circuits may be accelerated or deferred based on assessment of field conditions and operating performance.

<b>Circuit Description</b>	<b>Primary Cycle Length (Years)</b>	<b>Mid-cycle Inspection/selective Tree Maintenance (Years)</b>
Feeder Multi-phase	5-6	2 to 3
Feeder Laterals (single-phase)	5-6	
Industrial Circuits	5-6	Annual inspection and selective maintenance



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