



Blue Grass Energy

A Touchstone Energy Cooperative 

Making life better, the cooperative way

RECEIVED

APR 25 2018

PUBLIC SERVICE
COMMISSION

Electric Distribution Utility Annual Reliability Report For 2017

April 2018

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	Blue Grass Energy
REPORT PREPARED BY	Kyle Lancaster
E-MAIL ADDRESS OF PREPARER	kylel@bgenergy.com
PHONE NUMBER OF PREPARER	(859) 885-2103

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2017
-------------------------	------

SECTION 3: MAJOR EVENT DAYS (MED)

T_{MED}	10.48
FIRST DATE USED TO DETERMINE T_{MED}	January 1 2012
LAST DATE USED TO DETERMINE T_{MED}	December 31 2016
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 CUSTOMERS	<u>57267</u>	TOTAL CIRCUITS	<u>135</u>
-----------------	--------------	----------------	------------

Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	<u>118.46</u>	SAIDI	<u>105.06</u>
SAIFI	<u>1.0847</u>	SAIFI	<u>0.9802</u>

Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	<u>170.21</u>	SAIDI	<u>174.61</u>
SAIFI	<u>1.2449</u>	SAIFI	<u>1.2603</u>

Notes:

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

KENTUCKY PUBLIC SERVICE COMMISSION

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 OUTAGE 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

KENTUCKY PUBLIC SERVICE COMMISSION

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.

SECTION 7: UTILITY COMMENTS

41-134

Substation Name and Number 3M #2 41
 Substation Location Hwy 982, Cynthiana, KY 41031
 Circuit Name and Number 3M #2 134
 Circuit Location Webbers
 Total Circuit Length (Miles) 41.4
 2017 Member Count 676
 5 Year Average Member Count 666
 Date of Last Trim January-12
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
64.929299	1.227483745	180.7899408	2.639053254

Total Minutes/Frequency	216114.64	4085.6318	122214.00	1784.0000
Equipment Fault	9.84%	8.17%	16.82%	18.05%
Wind	4.99%	1.03%	0.11%	0.11%
Small Animal	14.22%	10.67%	19.93%	16.70%
Squirrel	0.27%	0.24%	0.00%	0.00%
Unknown Cause	3.44%	2.69%	1.60%	1.23%
Deterioration	0.86%	1.25%	0.13%	0.17%
Scheduled	6.27%	15.57%	0.36%	0.67%
Power Supplier	3.43%	15.24%	0.00%	0.00%
Bird	0.24%	0.22%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	5.90%	5.43%	6.78%	9.75%
Ice/Snow	0.03%	0.02%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.70%	0.56%	0.00%	0.00%
Tree - ROW	7.49%	5.29%	8.52%	7.34%
Lightning	34.54%	27.80%	43.75%	44.62%
Tree - Non ROW	5.05%	3.38%	1.18%	0.11%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	2.74%	2.42%	0.81%	1.23%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

41-164

Substation Name and Number 3M #2 41
 Substation Location Hwy 982, Cynthiana, KY 41031
 Circuit Name and Number 3M #2 164
 Circuit Location Oddville
 Total Circuit Length (Miles) 134.2
 2017 Member Count 1243
 5 Year Average Member Count 1224
 Date of Last Trim July-16
 Date of Next Trim 2022

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
179.116166	1.715441529	191.2268705	2.257441673

Total Minutes/Frequency	1096232.54	10498.9006	237695.00	2806.0000
Equipment Fault	17.75%	14.44%	4.81%	4.92%
Wind	5.71%	4.18%	5.69%	7.13%
Small Animal	1.57%	2.82%	4.43%	5.95%
Squirrel	1.68%	1.26%	0.04%	0.04%
Unknown Cause	1.37%	3.82%	0.74%	0.46%
Deterioration	1.84%	2.39%	0.00%	0.00%
Scheduled	0.88%	1.72%	0.00%	0.00%
Power Supplier	6.92%	11.12%	0.00%	0.00%
Bird	0.02%	0.04%	0.00%	0.00%
Overload	0.06%	0.10%	0.00%	0.00%
Public Accident	27.00%	30.12%	58.33%	62.19%
Ice/Snow	1.03%	0.30%	0.00%	0.00%
Fire	0.00%	0.01%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	1.57%	2.13%	0.02%	0.04%
Lightning	22.97%	15.72%	0.60%	0.57%
Tree - Non ROW	8.17%	7.69%	25.33%	18.71%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	1.46%	2.15%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Public Accident caused outages. No corrections necessary at this time.

Substation Name and Number	ALCAN 2	16
Substation Location	306 Mayde Road, Berea, KY 40403	
Circuit Name and Number	ALCAN 2	144
Circuit Location	HITACHI	
Total Circuit Length (Miles)	1.5	
2017 Member Count	1	
5 Year Average Member Count	1	
Date of Last Trim	February-14	
Date of Next Trim	2018	

	5 Year Average		2017	
	SAIDI	SAIFI	SAIDI	SAIFI
	13.8	0.4	69	2
Total Minutes/Frequency	69.00	2.0000	69.00	2.0000
Equipment Fault	0.00%	0.00%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	81.16%	50.00%	81.16%	50.00%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	18.84%	50.00%	18.84%	50.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	0.00%	0.00%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

31-114

Substation Name and Number BRACKEN_COUNTY 31
 Substation Location 61 New Zion Rd, Foster, KY 41043
 Circuit Name and Number BRACKEN_COUNTY 114
 Circuit Location Blakeston
 Total Circuit Length (Miles) 139.2
 2017 Member Count 1069
 5 Year Average Member Count 1070
 Date of Last Trim November-13
 Date of Next Trim 2019

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
209.1126415	1.835062642	320.1665108	2.123479888

Total Minutes/Frequency	1118572.00	9816.0000	342258.00	2270.0000
Equipment Fault	21.54%	27.26%	11.91%	11.10%
Wind	2.46%	2.86%	2.55%	1.67%
Small Animal	3.45%	3.38%	2.60%	4.27%
Squirrel	0.04%	0.06%	0.00%	0.00%
Unknown Cause	5.22%	6.51%	2.83%	3.44%
Deterioration	20.68%	15.52%	44.90%	42.73%
Scheduled	0.60%	1.33%	0.73%	1.10%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.54%	0.49%	1.28%	1.50%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	3.23%	3.43%	3.27%	4.67%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	12.32%	5.48%	0.00%	0.00%
Sag/Clearance	0.70%	0.96%	0.54%	0.97%
Tree - ROW	4.94%	5.68%	3.79%	4.71%
Lightning	17.53%	21.96%	16.25%	18.59%
Tree - Non ROW	6.75%	5.05%	9.30%	5.20%
Large Animal	0.01%	0.01%	0.03%	0.04%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

2016-2018 CWP conversion of deteriorating conductor.

26-144

Substation Name and Number	CLAY_LICK	26
Substation Location	5627 Louisville, Rd., Salvisa, KY 40372	
Circuit Name and Number	CLAY_LICK	144
Circuit Location	Bond's Mill	
Total Circuit Length (Miles)	61.3	
2017 Member Count	629	
5 Year Average Member Count	622	
Date of Last Trim	December-16	
Date of Next Trim	2022	

	5 Year Average		2017	
	SAIDI	SAIFI	SAIDI	SAIFI
	84.32607788	1.058509204	166.0937997	1.906200318

Total Minutes/Frequency	262257.00	3292.0000	104473.00	1199.0000
Equipment Fault	25.24%	28.55%	38.89%	55.13%
Wind	21.12%	21.63%	8.83%	8.67%
Small Animal	3.33%	5.74%	3.66%	6.67%
Squirrel	2.37%	3.40%	0.36%	0.75%
Unknown Cause	8.48%	11.94%	0.00%	0.00%
Deterioration	1.91%	2.22%	0.09%	0.17%
Scheduled	0.63%	1.12%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.56%	0.67%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	3.76%	3.37%	7.15%	4.50%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.42%	0.39%	0.00%	0.00%
Lightning	15.52%	14.06%	9.68%	14.10%
Tree - Non ROW	15.59%	5.62%	31.34%	10.01%
Large Animal	1.06%	1.18%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.03%	0.09%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

32-104

Substation Name and Number COLEMANSVILLE 32
 Substation Location Corner of HWY 1032 & 1054, Berry, KY 41003
 Circuit Name and Number COLEMANSVILLE 104
 Circuit Location Morgan Marcus
 Total Circuit Length (Miles) 110.7
 2017 Member Count 750
 5 Year Average Member Count 751
 Date of Last Trim August-12
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
123.5059104	0.927311573	149.2266667	1.876

Total Minutes/Frequency	463491.00	3480.0000	111920.00	1407.0000
Equipment Fault	10.95%	12.50%	8.26%	3.98%
Wind	3.35%	5.00%	5.64%	4.19%
Small Animal	1.07%	1.90%	0.55%	0.50%
Squirrel	0.05%	0.09%	0.00%	0.00%
Unknown Cause	5.38%	25.69%	16.27%	59.35%
Deterioration	4.66%	2.87%	0.05%	0.07%
Scheduled	3.43%	10.43%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	4.77%	2.39%	0.00%	0.00%
Public Accident	10.24%	7.76%	10.48%	7.46%
Ice/Snow	0.51%	0.17%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	3.48%	1.95%	14.40%	4.83%
Lightning	24.39%	17.13%	3.64%	6.75%
Tree - Non ROW	27.72%	12.13%	40.72%	12.86%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number	COLEMANSVILLE	32
Substation Location	Corner of HWY 1032 & 1054, Berry, KY 41003	
Circuit Name and Number	COLEMANSVILLE	124
Circuit Location	Robinson	
Total Circuit Length (Miles)	71.2	
2017 Member Count	580	
5 Year Average Member Count	580	
Date of Last Trim	October-12	
Date of Next Trim	2018	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
139.2118229	1.151903459	224.2172414	1.193103448

Total Minutes/Frequency	404014.00	3343.0000	130046.00	692.0000
Equipment Fault	31.04%	17.11%	84.74%	63.29%
Wind	0.52%	0.81%	0.00%	0.00%
Small Animal	9.96%	16.84%	4.71%	12.86%
Squirrel	0.08%	0.21%	0.00%	0.00%
Unknown Cause	8.02%	12.53%	3.68%	11.71%
Deterioration	7.70%	5.68%	4.79%	9.25%
Scheduled	1.62%	2.15%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.36%	0.87%	0.09%	0.14%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	9.15%	7.30%	0.12%	0.43%
Ice/Snow	0.13%	0.21%	0.00%	0.00%
Fire	0.55%	0.33%	1.62%	1.30%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.30%	0.57%	0.05%	0.14%
Lightning	25.75%	30.90%	0.20%	0.87%
Tree - Non ROW	4.83%	4.49%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

13-114

Substation Name and Number CROOKSVILLE 13
 Substation Location 765 Crooksville Rd., Richmond, KY 40475
 Circuit Name and Number CROOKSVILLE 114
 Circuit Location Speedwell
 Total Circuit Length (Miles) 68.6
 2017 Member Count 626
 5 Year Average Member Count 627
 Date of Last Trim November-14
 Date of Next Trim 2020

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
71.12611726	0.716540271	71.05591054	0.845047923

Total Minutes/Frequency	222846.00	2245.0000	44481.00	529.0000
Equipment Fault	4.31%	4.94%	0.71%	0.38%
Wind	1.18%	1.51%	5.93%	6.43%
Small Animal	14.34%	17.64%	35.81%	41.97%
Squirrel	0.87%	1.43%	4.11%	5.67%
Unknown Cause	11.34%	18.57%	13.66%	15.69%
Deterioration	7.18%	7.26%	0.00%	0.00%
Scheduled	0.27%	0.31%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	3.01%	3.30%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	11.14%	8.46%	5.49%	5.29%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	12.94%	9.31%	14.63%	9.45%
Lightning	23.63%	19.20%	8.01%	5.86%
Tree - Non ROW	8.77%	6.64%	11.63%	9.26%
Large Animal	0.77%	0.85%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.25%	0.58%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number	CROOKSVILLE	13
Substation Location	765 Crooksville Rd., Richmond, KY 40475	
Circuit Name and Number	CROOKSVILLE	144
Circuit Location	Crooksville Rd	
Total Circuit Length (Miles)	15.6	
2017 Member Count	358	
5 Year Average Member Count	358	
Date of Last Trim	November-14	
Date of Next Trim	2020	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
78.01910967	0.945987216	107.3184358	1.203910615

Total Minutes/Frequency	139793.00	1695.0000	38420.00	431.0000
Equipment Fault	3.21%	2.60%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	11.81%	15.69%	33.03%	44.55%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	1.44%	3.07%	4.48%	9.98%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	0.17%	0.35%	0.41%	0.70%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.25%	0.41%	0.00%	0.00%
Overload	0.02%	0.06%	0.00%	0.00%
Public Accident	18.07%	30.86%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	14.78%	16.46%	9.51%	10.21%
Lightning	2.77%	1.53%	0.00%	0.00%
Tree - Non ROW	47.48%	28.97%	52.58%	34.57%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number	DAVIS	4
Substation Location	3876 Delong Rd., Lexington, KY 40515	
Circuit Name and Number	DAVIS	104
Circuit Location	Ashgrove Pike	
Total Circuit Length (Miles)	18.6	
2017 Member Count	347	
5 Year Average Member Count	377	
Date of Last Trim	October-15	
Date of Next Trim	2021	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
99.93447845	1.107008679	301.1469741	2.622478386

Total Minutes/Frequency	188222.00	2085.0000	104498.00	910.0000
Equipment Fault	0.67%	0.38%	0.31%	0.22%
Wind	1.40%	2.73%	1.91%	5.93%
Small Animal	7.07%	8.11%	0.04%	0.11%
Squirrel	0.25%	0.43%	0.00%	0.00%
Unknown Cause	1.29%	2.30%	0.00%	0.00%
Deterioration	2.07%	1.29%	0.00%	0.00%
Scheduled	1.72%	1.53%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	3.35%	4.12%	2.79%	3.41%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	2.44%	1.15%	4.39%	2.64%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	17.01%	25.42%	4.28%	5.71%
Lightning	19.97%	20.82%	32.21%	38.46%
Tree - Non ROW	42.76%	31.70%	54.07%	43.52%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

Substation Name and Number	DAVIS	4
Substation Location	3876 Delong Rd., Lexington, KY	40515
Circuit Name and Number	DAVIS	124
Circuit Location	E Hickman	
Total Circuit Length (Miles)	64.2	
2017 Member Count	465	
5 Year Average Member Count	505	
Date of Last Trim	October-15	
Date of Next Trim	2021	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
184.0560991	2.387935983	187.4430108	1.356989247

Total Minutes/Frequency	464546.00	6027.0000	87161.00	631.0000
Equipment Fault	44.00%	53.06%	1.90%	4.28%
Wind	13.84%	10.98%	0.04%	0.16%
Small Animal	0.96%	1.14%	0.45%	1.11%
Squirrel	2.50%	1.43%	0.00%	0.00%
Unknown Cause	2.41%	2.51%	0.00%	0.00%
Deterioration	19.41%	11.73%	83.81%	81.30%
Scheduled	0.41%	0.58%	0.26%	1.43%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.31%	0.41%	0.00%	0.00%
Overload	3.04%	10.20%	0.00%	0.00%
Public Accident	4.41%	2.37%	0.61%	0.48%
Ice/Snow	0.22%	0.17%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.02%	0.02%	0.00%	0.00%
Tree - ROW	2.35%	2.22%	0.00%	0.00%
Lightning	1.26%	1.14%	3.19%	6.81%
Tree - Non ROW	4.86%	2.02%	9.73%	4.44%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

2016-2018 CWP conversion of deteriorating conductor.

Substation Name and Number FAYETTE2 6
 Substation Location 2442 Armstrong Mill, Lexington, KY 40515
 Circuit Name and Number FAYETTE2 124
 Circuit Location Armstrong Mill
 Total Circuit Length (Miles) 6.4
 2017 Member Count 1063
 5 Year Average Member Count 1065
 Date of Last Trim December-16
 Date of Next Trim 2020

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
54.26131378	0.466753492	186.6660395	0.904045155

Total Minutes/Frequency	289004.00	2486.0000	198426.00	961.0000
Equipment Fault	72.15%	42.52%	99.94%	99.69%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	0.36%	0.76%	0.00%	0.00%
Squirrel	0.35%	0.72%	0.06%	0.31%
Unknown Cause	0.68%	1.73%	0.00%	0.00%
Deterioration	0.78%	2.94%	0.00%	0.00%
Scheduled	1.08%	9.05%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	24.60%	42.28%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	0.00%	0.00%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

Substation Name and Number HICKORY PLAINS 9
 Substation Location 1075 Old US 25, Berea, KY 40403
 Circuit Name and Number HICKORY PLAINS 134
 Circuit Location Red Lick
 Total Circuit Length (Miles) 73.7
 2017 Member Count 1106
 5 Year Average Member Count 1094
 Date of Last Trim May-13
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
50.36677528	0.48217906	72.92585895	0.754068716

Total Minutes/Frequency	275452.00	2637.0000	80656.00	834.0000
Equipment Fault	6.36%	7.21%	0.10%	0.12%
Wind	4.30%	4.02%	6.59%	7.67%
Small Animal	9.34%	14.98%	13.84%	20.38%
Squirrel	0.14%	0.34%	0.00%	0.00%
Unknown Cause	8.00%	10.09%	3.15%	3.48%
Deterioration	0.85%	0.53%	0.00%	0.00%
Scheduled	0.31%	0.80%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.26%	0.42%	0.00%	0.00%
Overload	2.14%	2.28%	0.00%	0.00%
Public Accident	25.63%	17.67%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	14.22%	17.52%	31.89%	42.57%
Lightning	10.37%	9.59%	15.63%	11.99%
Tree - Non ROW	17.46%	13.35%	28.80%	13.79%
Large Animal	0.64%	1.21%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Circuit to be trimmed in 2018.

Substation Name and Number HICKORY PLAINS 9
 Substation Location 1075 Old US 25, Berea, KY 40403
 Circuit Name and Number HICKORY PLAINS 154
 Circuit Location North-City of Berea
 Total Circuit Length (Miles) 12.9
 2017 Member Count 425
 5 Year Average Member Count 420
 Date of Last Trim March-13
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
46.03265315	0.576722683	46.73882353	0.731764706

Total Minutes/Frequency	96739.00	1212.0000	19864.00	311.0000
Equipment Fault	4.95%	3.63%	0.60%	0.32%
Wind	5.25%	8.91%	15.33%	22.51%
Small Animal	12.36%	18.23%	40.86%	42.44%
Squirrel	0.07%	0.17%	0.00%	0.00%
Unknown Cause	6.47%	8.99%	11.81%	11.25%
Deterioration	3.32%	3.14%	0.00%	0.00%
Scheduled	0.81%	0.74%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.29%	0.33%	0.00%	0.00%
Public Accident	0.25%	0.25%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	14.06%	11.47%	31.01%	22.51%
Lightning	50.89%	40.18%	0.39%	0.96%
Tree - Non ROW	1.28%	3.96%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Circuit to be trimmed in 2018. No corrections necessary at this time.

34-124

Substation Name and Number LEES_LICK 34
 Substation Location HWY 1842, Cynthiana, KY 41031
 Circuit Name and Number LEES_LICK 124
 Circuit Location Leesburg
 Total Circuit Length (Miles) 14.3
 2017 Member Count 154
 5 Year Average Member Count 171
 Date of Last Trim November-15
 Date of Next Trim 2021

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
162.8591254	1.410804652	386.2272727	1.805194805

Total Minutes/Frequency	139541.02	1208.8062	59479.00	278.0000
Equipment Fault	4.57%	3.81%	0.00%	0.00%
Wind	7.58%	9.60%	0.00%	0.00%
Small Animal	3.42%	5.29%	3.40%	8.27%
Squirrel	0.17%	0.25%	0.00%	0.00%
Unknown Cause	3.19%	3.89%	3.05%	8.27%
Deterioration	8.17%	4.72%	0.00%	0.00%
Scheduled	0.55%	0.50%	0.00%	0.00%
Power Supplier	10.90%	24.22%	0.00%	0.00%
Bird	0.08%	0.17%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	1.08%	4.80%	0.00%	0.00%
Ice/Snow	0.30%	0.17%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.06%	0.17%	0.00%	0.00%
Lightning	48.73%	35.82%	67.24%	54.68%
Tree - Non ROW	11.21%	6.62%	26.30%	28.78%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

Substation Name and Number	NEWBY	7
Substation Location	247 Maple Grove Rd., Richmond, KY 40475	
Circuit Name and Number	NEWBY	104
Circuit Location	Hickory Hill	
Total Circuit Length (Miles)	14.6	
2017 Member Count	256	
5 Year Average Member Count	255	
Date of Last Trim	December-17	
Date of Next Trim	2023	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
128.6236968	0.819399057	131.6289063	1.203125

Total Minutes/Frequency	164037.00	1045.0000	33697.00	308.0000
Equipment Fault	4.60%	4.59%	0.54%	0.32%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	3.08%	7.56%	9.02%	15.91%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.91%	1.15%	4.21%	3.57%
Deterioration	0.16%	0.29%	0.55%	0.32%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.41%	1.34%	0.00%	0.00%
Overload	0.05%	0.19%	0.00%	0.00%
Public Accident	0.00%	0.00%	0.00%	0.00%
Ice/Snow	0.10%	0.10%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	64.78%	55.79%	85.67%	79.87%
Lightning	2.73%	3.54%	0.00%	0.00%
Tree - Non ROW	23.19%	25.45%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Circuit trimmed at the end of 2017.

Substation Name and Number NEWBY 7
 Substation Location 247 Maple Grove Rd., Richmond, KY 40475
 Circuit Name and Number NEWBY 124
 Circuit Location Shallow Ford
 Total Circuit Length (Miles) 14.6
 2017 Member Count 156
 5 Year Average Member Count 155
 Date of Last Trim January-12
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
137.6939447	0.958629543	136.0897436	1.435897436

Total Minutes/Frequency	107009.00	745.0000	21230.00	224.0000
Equipment Fault	15.42%	22.42%	71.93%	67.86%
Wind	0.94%	0.40%	4.40%	0.89%
Small Animal	1.59%	3.76%	2.07%	3.13%
Squirrel	0.30%	0.54%	0.00%	0.00%
Unknown Cause	0.20%	0.40%	0.00%	0.00%
Deterioration	0.34%	0.27%	0.00%	0.00%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.04%	0.13%	0.00%	0.00%
Public Accident	7.26%	14.50%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.12%	0.13%	0.00%	0.00%
Tree - ROW	4.29%	8.46%	21.60%	28.13%
Lightning	4.50%	7.25%	0.00%	0.00%
Tree - Non ROW	64.94%	41.61%	0.00%	0.00%
Large Animal	0.06%	0.13%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

22-104

Substation Name and Number NINEVAH 22
 Substation Location 1746 Clifton Rd., Lawrenceburg, KY 40342
 Circuit Name and Number NINEVAH 104
 Circuit Location Wild Cat/ Fox Creek Office
 Total Circuit Length (Miles) 44.3
 2017 Member Count 406
 5 Year Average Member Count 403
 Date of Last Trim December-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
164.0630824	1.3169005	226.137931	1.724137931

Total Minutes/Frequency	330365.11	2651.7725	91812.00	700.0000
Equipment Fault	1.63%	2.38%	0.07%	0.14%
Wind	4.44%	3.36%	8.13%	7.43%
Small Animal	0.94%	2.56%	1.07%	3.14%
Squirrel	0.51%	1.55%	0.00%	0.00%
Unknown Cause	1.95%	4.11%	0.00%	0.00%
Deterioration	3.41%	2.34%	0.33%	0.57%
Scheduled	1.49%	5.09%	0.00%	0.00%
Power Supplier	43.11%	29.37%	0.00%	0.00%
Bird	0.01%	0.04%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.46%	0.83%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	7.73%	6.15%	0.52%	0.57%
Lightning	8.22%	18.03%	5.64%	9.00%
Tree - Non ROW	26.11%	24.21%	84.24%	79.14%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

22-134

Substation Name and Number NINEVAH 22
 Substation Location 1746 Clifton Rd., Lawrenceburg, KY 40342
 Circuit Name and Number NINEVAH 134
 Circuit Location Lane's Mill/Dove Creek Estates
 Total Circuit Length (Miles) 59.0
 2017 Member Count 953
 5 Year Average Member Count 945
 Date of Last Trim December-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
241.1537703	2.166218256	188.2109129	2.277019937

Total Minutes/Frequency	1139840.89	10238.8784	179365.00	2170.0000
Equipment Fault	13.29%	20.14%	0.39%	0.32%
Wind	18.96%	19.47%	41.25%	58.62%
Small Animal	1.29%	2.51%	2.27%	3.00%
Squirrel	0.43%	0.88%	0.47%	0.74%
Unknown Cause	3.82%	5.57%	9.45%	12.40%
Deterioration	3.04%	2.34%	0.68%	0.83%
Scheduled	0.90%	2.69%	0.16%	1.20%
Power Supplier	30.64%	18.50%	0.00%	0.00%
Bird	0.57%	1.43%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	3.53%	9.75%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.01%	0.02%	0.00%	0.00%
Sag/Clearance	0.33%	0.40%	0.00%	0.00%
Tree - ROW	2.15%	1.81%	5.60%	4.10%
Lightning	2.00%	1.88%	1.71%	1.01%
Tree - Non ROW	19.02%	12.64%	38.02%	17.79%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

15-114

Substation Name and Number NORTH MADISON 15
 Substation Location 2064 Jacks Creek Pike, Richmond KY 40475
 Circuit Name and Number NORTH MADISON 114
 Circuit Location Boones Trace
 Total Circuit Length (Miles) 29.2
 2017 Member Count 480
 5 Year Average Member Count 470
 Date of Last Trim November-16
 Date of Next Trim 2022

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
97.85684536	0.699035208	122.41875	0.608333333

Total Minutes/Frequency	230001.00	1643.0000	58761.00	292.0000
Equipment Fault	56.79%	34.88%	81.21%	56.85%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	4.16%	6.21%	4.86%	10.62%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.64%	1.22%	1.14%	3.42%
Deterioration	0.41%	0.67%	1.16%	3.42%
Scheduled	0.83%	2.07%	1.19%	5.82%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	6.36%	6.82%	0.00%	0.00%
Public Accident	9.96%	18.87%	10.44%	19.86%
Ice/Snow	0.57%	0.85%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.10%	0.12%	0.00%	0.00%
Tree - ROW	0.07%	0.12%	0.00%	0.00%
Lightning	2.00%	2.56%	0.00%	0.00%
Tree - Non ROW	18.10%	25.62%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

15-124

Substation Name and Number NORTH MADISON 15
 Substation Location 2064 Jacks Creek Pike, Richmond KY 40475
 Circuit Name and Number NORTH MADISON 124
 Circuit Location Indigo Run
 Total Circuit Length (Miles) 17.3
 2017 Member Count 260
 5 Year Average Member Count 255
 Date of Last Trim November-15
 Date of Next Trim 2021

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
3.142663834	0.034560662	3.846153846	0.053846154

Total Minutes/Frequency	4001.00	44.0000	1000.00	14.0000
Equipment Fault	20.09%	11.36%	5.50%	7.14%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	14.92%	18.18%	0.00%	0.00%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	9.67%	13.64%	5.00%	7.14%
Deterioration	2.95%	4.55%	11.80%	14.29%
Scheduled	7.37%	9.09%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.00%	0.00%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	4.77%	2.27%	0.00%	0.00%
Lightning	35.87%	34.09%	60.30%	50.00%
Tree - Non ROW	4.35%	6.82%	17.40%	21.43%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

40-104

Substation Name and Number OXFORD 40
 Substation Location 3466 Cynthiana Rd., Georgetown, KY 40324
 Circuit Name and Number OXFORD 104
 Circuit Location Carrick Pike
 Total Circuit Length (Miles) 38.6
 2017 Member Count 334
 5 Year Average Member Count 272
 Date of Last Trim June-14
 Date of Next Trim 2020

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
254.0876257	1.532129087	438.8083832	2.104790419

Total Minutes/Frequency	344931.34	2079.9098	146562.00	703.0000
Equipment Fault	55.24%	34.09%	46.95%	40.11%
Wind	0.06%	0.05%	0.00%	0.00%
Small Animal	0.45%	1.06%	0.39%	1.00%
Squirrel	0.11%	0.19%	0.00%	0.00%
Unknown Cause	0.83%	1.73%	0.00%	0.00%
Deterioration	1.65%	2.79%	0.00%	0.00%
Scheduled	0.60%	2.84%	0.00%	0.00%
Power Supplier	12.01%	27.79%	0.00%	0.00%
Bird	0.06%	0.19%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.28%	0.67%	0.38%	1.71%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	3.57%	5.24%	2.75%	5.26%
Lightning	7.11%	10.14%	13.33%	20.91%
Tree - Non ROW	18.04%	13.22%	36.19%	31.01%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

Substation Name and Number	POWELL TAYLOR	28
Substation Location	1024 Powell Taylor Rd., Lawrenceburg, KY 40342	
Circuit Name and Number	POWELL TAYLOR	114
Circuit Location	Birdie Rd	
Total Circuit Length (Miles)	56.9	
2017 Member Count	376	
5 Year Average Member Count	372	
Date of Last Trim	November-17	
Date of Next Trim	2023	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
162.1254368	1.447183345	243.481383	2.385638298

Total Minutes/Frequency	301244.00	2689.0000	91549.00	897.0000
Equipment Fault	3.84%	3.16%	0.12%	0.11%
Wind	23.21%	15.58%	2.55%	8.58%
Small Animal	3.11%	3.12%	7.73%	4.46%
Squirrel	0.55%	1.12%	0.09%	0.22%
Unknown Cause	1.36%	2.23%	0.00%	0.00%
Deterioration	0.17%	0.30%	0.05%	0.11%
Scheduled	0.68%	2.49%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	2.46%	2.60%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	4.53%	6.55%	4.04%	5.46%
Lightning	10.59%	14.28%	22.20%	32.33%
Tree - Non ROW	47.63%	44.14%	57.06%	35.45%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	1.87%	4.43%	6.15%	13.27%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

Substation Name and Number	POWELL TAYLOR	28
Substation Location	1024 Powell Taylor Rd., Lawrenceburg, KY 40342	
Circuit Name and Number	POWELL TAYLOR	124
Circuit Location	Puckett Rd	
Total Circuit Length (Miles)	33.4	
2017 Member Count	343	
5 Year Average Member Count	339	
Date of Last Trim	November-12	
Date of Next Trim	2018	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
67.65545226	0.534508574	108.1895044	0.577259475

Total Minutes/Frequency	114677.00	906.0000	37109.00	198.0000
Equipment Fault	9.87%	12.25%	0.00%	0.00%
Wind	6.03%	10.93%	16.28%	45.45%
Small Animal	15.77%	18.87%	0.75%	2.53%
Squirrel	0.31%	0.66%	0.00%	0.00%
Unknown Cause	2.76%	5.52%	0.00%	0.00%
Deterioration	1.51%	2.54%	0.10%	0.51%
Scheduled	4.33%	5.85%	0.46%	1.01%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.38%	0.77%	0.00%	0.00%
Overload	0.09%	0.22%	0.00%	0.00%
Public Accident	0.52%	1.21%	0.25%	0.51%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.61%	1.32%	0.00%	0.00%
Tree - ROW	0.04%	0.11%	0.00%	0.00%
Lightning	12.62%	13.13%	0.38%	2.53%
Tree - Non ROW	45.15%	26.60%	81.78%	47.47%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

Substation Name and Number POWELL TAYLOR 28
 Substation Location 1024 Powell Taylor Rd., Lawrenceburg, KY 40342
 Circuit Name and Number POWELL TAYLOR 134
 Circuit Location Walmart/Briar Creek
 Total Circuit Length (Miles) 10.2
 2017 Member Count 328
 5 Year Average Member Count 324
 Date of Last Trim February-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
24.18549493	0.24184261	13.76219512	0.283536585

Total Minutes/Frequency	39202.00	392.0000	4514.00	93.0000
Equipment Fault	6.62%	4.34%	4.21%	1.08%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	4.12%	11.99%	17.46%	16.13%
Squirrel	2.49%	4.34%	0.00%	0.00%
Unknown Cause	0.41%	1.02%	0.00%	0.00%
Deterioration	3.43%	12.24%	1.06%	1.08%
Scheduled	10.26%	17.86%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	1.18%	1.53%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.34%	0.51%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	9.84%	3.32%	2.50%	1.08%
Tree - Non ROW	52.06%	21.43%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	9.25%	21.43%	74.77%	80.65%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number POWELL TAYLOR 28
 Substation Location 1024 Powell Taylor Rd., Lawrenceburg, KY 40342
 Circuit Name and Number POWELL TAYLOR 144
 Circuit Location Powell Taylor/Glenview
 Total Circuit Length (Miles) 9.2
 2017 Member Count 182
 5 Year Average Member Count 180
 Date of Last Trim July-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
60.1281529	0.910611461	21.32967033	1.263736264

Total Minutes/Frequency	54079.00	819.0000	3882.00	230.0000
Equipment Fault	7.07%	3.79%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	5.69%	5.74%	32.43%	9.57%
Squirrel	1.76%	2.32%	4.95%	1.74%
Unknown Cause	2.75%	2.44%	0.00%	0.00%
Deterioration	2.81%	2.81%	0.00%	0.00%
Scheduled	2.04%	22.47%	28.44%	80.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	14.76%	25.27%	10.43%	3.91%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	13.46%	6.72%	4.95%	1.74%
Lightning	6.35%	5.62%	6.59%	1.74%
Tree - Non ROW	43.31%	22.83%	12.21%	1.30%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

12-104

Substation Name and Number SOUTH ELKHORN 12
 Substation Location 3251 Keene Rd., Nicholasville, KY 40356
 Circuit Name and Number SOUTH ELKHORN 104
 Circuit Location Firebrook/Dogwood Trace
 Total Circuit Length (Miles) 21.3
 2017 Member Count 1078
 5 Year Average Member Count 1075
 Date of Last Trim January-15
 Date of Next Trim 2019

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
30.28245864	0.536614081	58.25020308	1.080975781

Total Minutes/Frequency	162767.72	2884.2919	62793.72	1165.2919
Equipment Fault	24.07%	40.63%	11.57%	1.97%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	2.46%	2.01%	4.48%	3.26%
Squirrel	0.86%	0.94%	2.07%	2.15%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.55%	0.31%	0.00%	0.00%
Scheduled	0.34%	0.52%	0.00%	0.00%
Power Supplier	31.02%	37.25%	80.41%	92.19%
Bird	0.45%	0.62%	0.00%	0.00%
Overload	0.57%	0.17%	1.47%	0.43%
Public Accident	37.26%	15.36%	0.00%	0.00%
Ice/Snow	0.83%	0.66%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	1.49%	1.42%	0.00%	0.00%
Lightning	0.10%	0.10%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Power Supplier caused outages. No corrections necessary at this time.

12-114

Substation Name and Number SOUTH ELKHORN 12
 Substation Location 3251 Keene Rd., Nicholasville, KY 40356
 Circuit Name and Number SOUTH ELKHORN 114
 Circuit Location Bellarive & Equestrian Woods
 Total Circuit Length (Miles) 16.8
 2017 Member Count 427
 5 Year Average Member Count 426
 Date of Last Trim May-15
 Date of Next Trim 2019

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
48.05517619	0.669091801	46.83832923	0.996560196

Total Minutes/Frequency	102311.97	1424.5312	19999.97	425.5312
Equipment Fault	2.59%	1.12%	0.00%	0.00%
Wind	0.40%	0.14%	0.00%	0.00%
Small Animal	36.89%	29.55%	0.00%	0.00%
Squirrel	0.58%	0.77%	0.00%	0.00%
Unknown Cause	0.45%	0.49%	0.00%	0.00%
Deterioration	8.39%	2.67%	0.00%	0.00%
Scheduled	0.02%	0.21%	0.00%	0.00%
Power Supplier	19.55%	29.87%	100.00%	100.00%
Bird	23.34%	29.41%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.00%	0.00%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	1.09%	1.68%	0.00%	0.00%
Lightning	0.00%	0.00%	0.00%	0.00%
Tree - Non ROW	4.10%	2.39%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	2.59%	1.68%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Power Supplier caused outages. No corrections necessary at this time.

Substation Name and Number	SOUTH ELKHORN	12
Substation Location	3251 Keene Rd., Nicholasville, KY	40356
Circuit Name and Number	SOUTH ELKHORN	124
Circuit Location	Champions	
Total Circuit Length (Miles)	29.5	
2017 Member Count	402	
5 Year Average Member Count	401	
Date of Last Trim	December-15	
Date of Next Trim	2021	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
64.57742748	0.590010518	65.42041878	1.203027858

Total Minutes/Frequency	129439.01	1182.6172	26299.01	483.6172
Equipment Fault	3.25%	3.04%	16.02%	7.44%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	2.33%	4.82%	0.00%	0.00%
Squirrel	2.16%	4.65%	6.35%	6.62%
Unknown Cause	2.92%	3.04%	0.00%	0.00%
Deterioration	1.70%	1.10%	0.00%	0.00%
Scheduled	0.66%	0.59%	0.00%	0.00%
Power Supplier	14.55%	33.88%	71.60%	82.84%
Bird	0.52%	1.35%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.81%	0.85%	2.68%	0.83%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	50.38%	36.70%	3.35%	2.27%
Lightning	4.45%	2.62%	0.00%	0.00%
Tree - Non ROW	16.27%	7.36%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Power Supplier caused outages. No corrections necessary at this time.

12-134

Substation Name and Number SOUTH ELKHORN 12
 Substation Location 3251 Keene Rd., Nicholasville, KY 40356
 Circuit Name and Number SOUTH ELKHORN 134
 Circuit Location Keene/South Elkhorn Rd
 Total Circuit Length (Miles) 8.5
 2017 Member Count 128
 5 Year Average Member Count 128
 Date of Last Trim February-13
 Date of Next Trim 2018

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
19.19144517	0.472503421	71.93989174	1.160622697

Total Minutes/Frequency	12248.31	301.5597	9208.31	148.5597
Equipment Fault	1.72%	0.66%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	0.68%	0.33%	0.00%	0.00%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.60%	0.33%	0.00%	0.00%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	48.95%	42.30%	65.11%	85.86%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	4.72%	6.96%	0.00%	0.00%
Public Accident	42.82%	49.08%	34.89%	14.14%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	0.51%	0.33%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Power Supplier caused outages. Public Accident caused outages. No corrections necessary at this time.

14-104

Substation Name and Number SOUTH JESSAMINE 14
 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) 4.3
 2017 Member Count 23
 5 Year Average Member Count 22
 Date of Last Trim December-16
 Date of Next Trim 2022

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
4.437335944	0.044551566	8.47826087	0.086956522

Total Minutes/Frequency	498.00	5.0000	195.00	2.0000
Equipment Fault	47.79%	40.00%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	20.48%	20.00%	52.31%	50.00%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	13.05%	20.00%	0.00%	0.00%
Public Accident	0.00%	0.00%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	0.00%	0.00%	0.00%	0.00%
Tree - Non ROW	18.67%	20.00%	47.69%	50.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number SOUTH JESSAMINE 14
 Substation Location 1307 Chrisman Mill Rd., Nicholasville, KY 40356
 Circuit Name and Number SOUTH JESSAMINE 124
 Circuit Location Sulpher Well
 Total Circuit Length (Miles) 59.3
 2017 Member Count 558
 5 Year Average Member Count 545
 Date of Last Trim June-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
104.634398	0.728665608	200.6666667	0.784946237

Total Minutes/Frequency	284897.00	1984.0000	111972.00	438.0000
Equipment Fault	19.40%	14.47%	9.16%	4.34%
Wind	26.47%	9.32%	67.23%	42.01%
Small Animal	2.20%	5.49%	0.48%	2.28%
Squirrel	0.68%	1.61%	1.03%	4.57%
Unknown Cause	1.35%	2.67%	0.00%	0.00%
Deterioration	2.36%	2.72%	0.00%	0.00%
Scheduled	0.66%	0.76%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.59%	2.47%	0.00%	0.00%
Overload	0.10%	0.25%	0.00%	0.00%
Public Accident	17.92%	26.92%	4.06%	20.78%
Ice/Snow	0.61%	0.50%	0.00%	0.00%
Fire	11.06%	10.53%	0.00%	0.00%
Sag/Clearance	0.31%	1.36%	0.00%	0.00%
Tree - ROW	1.20%	2.27%	2.34%	7.76%
Lightning	7.61%	12.25%	5.76%	9.36%
Tree - Non ROW	7.46%	6.30%	9.95%	8.68%
Large Animal	0.03%	0.05%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.05%	0.01%	0.23%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Storm related outages. No corrections necessary at this time.

Substation Name and Number	SOUTH JESSAMINE	14
Substation Location	1307 Chrisman Mill Rd., Nicholasville, KY 40356	
Circuit Name and Number	SOUTH JESSAMINE	134
Circuit Location	Chrisman Mill	
Total Circuit Length (Miles)	112.2	
2017 Member Count	889	
5 Year Average Member Count	868	
Date of Last Trim	January-15	
Date of Next Trim	2021	

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
109.0643978	0.921180045	256.1687289	1.494938133

Total Minutes/Frequency	473112.00	3996.0000	227734.00	1329.0000
Equipment Fault	38.90%	27.63%	67.93%	67.27%
Wind	2.87%	0.95%	5.76%	2.48%
Small Animal	3.39%	5.21%	4.20%	7.90%
Squirrel	1.70%	1.88%	0.11%	0.30%
Unknown Cause	4.88%	6.08%	0.58%	1.20%
Deterioration	1.88%	1.55%	0.02%	0.08%
Scheduled	1.01%	19.87%	0.08%	0.15%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.75%	1.65%	0.33%	0.83%
Overload	0.01%	0.03%	0.00%	0.00%
Public Accident	19.95%	11.86%	0.55%	1.05%
Ice/Snow	1.12%	1.23%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.93%	1.28%	0.99%	2.26%
Lightning	8.41%	11.89%	0.73%	1.35%
Tree - Non ROW	14.19%	8.91%	18.72%	15.12%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

17-114

Substation Name and Number SOUTH POINT 17
 Substation Location Laudale Drive, Nicholasville, KY 40356
 Circuit Name and Number SOUTH POINT 114
 Circuit Location Southpoint Drive
 Total Circuit Length (Miles) 6.5
 2017 Member Count 431
 5 Year Average Member Count 407
 Date of Last Trim February-15
 Date of Next Trim 2021

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
0.964489753	0.009821688	1.05800464	0.009280742

Total Minutes/Frequency	1964.00	20.0000	456.00	4.0000
Equipment Fault	23.22%	20.00%	100.00%	100.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	15.99%	30.00%	0.00%	0.00%
Squirrel	0.00%	0.00%	0.00%	0.00%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	2.55%	10.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	3.11%	5.00%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	13.75%	20.00%	0.00%	0.00%
Lightning	41.40%	15.00%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

Substation Name and Number WEST BEREA 8
 Substation Location 5350 Walnutmeadow Rd., Berea, KY 40403
 Circuit Name and Number WEST BEREA 134
 Circuit Location Wallacton
 Total Circuit Length (Miles) 36.1
 2017 Member Count 462
 5 Year Average Member Count 457
 Date of Last Trim December-15
 Date of Next Trim 2021

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
151.8580025	1.666939864	129.1298701	2.166666667

Total Minutes/Frequency	346635.00	3805.0000	59658.00	1001.0000
Equipment Fault	24.30%	19.13%	56.22%	26.37%
Wind	0.97%	1.47%	0.21%	0.20%
Small Animal	10.35%	15.61%	12.53%	8.29%
Squirrel	0.27%	0.53%	1.07%	1.00%
Unknown Cause	20.17%	14.98%	5.68%	4.00%
Deterioration	0.64%	1.08%	0.21%	0.20%
Scheduled	0.31%	0.21%	0.00%	0.00%
Power Supplier	9.65%	11.72%	0.00%	0.00%
Bird	0.14%	0.21%	0.00%	0.00%
Overload	0.03%	0.05%	0.00%	0.00%
Public Accident	17.64%	12.85%	0.00%	0.00%
Ice/Snow	0.03%	0.03%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	5.76%	3.07%	2.87%	1.30%
Lightning	2.10%	1.60%	2.34%	1.50%
Tree - Non ROW	7.64%	17.45%	18.85%	57.14%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

Substation Name and Number WEST BEREA 8
 Substation Location 5350 Walnutmeadow Rd., Berea, KY 40403
 Circuit Name and Number WEST BEREA 154
 Circuit Location Dogwood
 Total Circuit Length (Miles) 44.5
 2017 Member Count 1215
 5 Year Average Member Count 1201
 Date of Last Trim November-15
 Date of Next Trim 2021

	5 Year Average		2017	
	SAIDI	SAIFI	SAIDI	SAIFI
	122.7242768	1.069963324	134.1045267	1.167078189

Total Minutes/Frequency	736715.00	6423.0000	162937.00	1418.0000
Equipment Fault	9.20%	7.99%	40.22%	34.70%
Wind	4.94%	8.38%	0.00%	0.00%
Small Animal	3.97%	6.93%	5.34%	6.77%
Squirrel	0.23%	0.62%	0.12%	0.35%
Unknown Cause	2.22%	2.65%	0.07%	0.07%
Deterioration	0.01%	0.02%	0.00%	0.00%
Scheduled	0.94%	0.75%	2.55%	2.05%
Power Supplier	11.38%	17.17%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.06%	0.08%	0.00%	0.00%
Public Accident	20.02%	19.55%	0.37%	1.55%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.14%	0.30%	0.00%	0.00%
Tree - ROW	4.30%	5.46%	0.99%	1.97%
Lightning	7.84%	9.73%	0.21%	0.35%
Tree - Non ROW	34.73%	20.38%	50.13%	52.19%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.

Substation Name and Number	WEST NICHOLASVILLE	3
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)	47.8	
2017 Member Count	420	
5 Year Average Member Count	418	
Date of Last Trim	April-15	
Date of Next Trim	2021	

	5 Year Average		2017	
	SAIDI	SAIFI	SAIDI	SAIFI
	88.4387708	0.844771624	230.599576	2.402481834
Total Minutes/Frequency	184676.82	1764.0424	96851.82	1009.0424
Equipment Fault	0.67%	0.74%	0.33%	0.20%
Wind	0.18%	0.23%	0.35%	0.40%
Small Animal	13.91%	29.82%	19.66%	42.22%
Squirrel	0.67%	1.19%	1.28%	2.08%
Unknown Cause	1.71%	2.83%	0.00%	0.00%
Deterioration	0.11%	0.23%	0.00%	0.00%
Scheduled	0.77%	0.96%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	4.81%	6.58%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	15.43%	10.26%	3.83%	2.68%
Ice/Snow	6.38%	5.39%	0.00%	0.00%
Fire	0.19%	0.17%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	9.07%	5.27%	0.00%	0.00%
Lightning	4.79%	3.97%	1.00%	2.08%
Tree - Non ROW	41.30%	32.37%	73.56%	50.34%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number WEST NICHOLASVILLE 3
 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) 45.7
 2017 Member Count 996
 5 Year Average Member Count 990
 Date of Last Trim May-17
 Date of Next Trim 2023

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
57.27930212	0.664278523	45.3228118	1.044679195

Total Minutes/Frequency	283646.52	3289.5005	45141.52	1040.5005
Equipment Fault	31.73%	22.68%	1.74%	1.25%
Wind	36.18%	28.09%	0.00%	0.00%
Small Animal	17.93%	34.49%	95.63%	96.06%
Squirrel	0.39%	0.82%	2.39%	2.50%
Unknown Cause	0.27%	0.46%	0.00%	0.00%
Deterioration	0.29%	0.24%	0.00%	0.00%
Scheduled	0.22%	0.36%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	1.41%	2.55%	0.23%	0.19%
Overload	2.02%	3.19%	0.00%	0.00%
Public Accident	0.21%	0.30%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	2.58%	1.98%	0.00%	0.00%
Lightning	1.46%	1.43%	0.00%	0.00%
Tree - Non ROW	5.31%	3.40%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

3-154

Substation Name and Number WEST NICHOLASVILLE 3
 Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356
 Circuit Name and Number WEST NICHOLASVILLE 154
 Circuit Location North Main St
 Total Circuit Length (Miles) 8.6
 2017 Member Count 693
 5 Year Average Member Count 689
 Date of Last Trim November-16
 Date of Next Trim 2022

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
16.62666479	0.39225529	49.64697859	1.127734359

Total Minutes/Frequency	57287.36	1351.5199	34405.36	781.5199
Equipment Fault	3.51%	2.15%	0.00%	0.00%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	58.78%	58.42%	96.39%	98.21%
Squirrel	0.59%	0.67%	0.00%	0.00%
Unknown Cause	0.00%	0.00%	0.00%	0.00%
Deterioration	0.81%	0.44%	1.34%	0.77%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	13.77%	23.38%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	11.14%	8.29%	0.00%	0.00%
Lightning	11.41%	6.66%	2.27%	1.02%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

Substation Name and Number WEST NICHOLASVILLE 3
 Substation Location 398 Bass Pond Glen Dr., Nicholasville, KY 40356
 Circuit Name and Number WEST NICHOLASVILLE 164
 Circuit Location Squire Lake
 Total Circuit Length (Miles) 6.3
 2017 Member Count 445
 5 Year Average Member Count 442
 Date of Last Trim January-13
 Date of Next Trim 2019

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
30.95614256	0.498366327	55.37980607	1.138490394

Total Minutes/Frequency	68490.01	1102.6282	24644.01	506.6282
Equipment Fault	54.27%	44.17%	1.62%	0.39%
Wind	0.34%	0.27%	0.00%	0.00%
Small Animal	34.96%	48.40%	87.57%	96.05%
Squirrel	0.29%	0.63%	0.46%	0.59%
Unknown Cause	0.55%	1.18%	0.00%	0.00%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	0.90%	0.27%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	4.67%	3.54%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.00%	0.00%	0.00%	0.00%
Lightning	0.30%	0.18%	0.00%	0.00%
Tree - Non ROW	3.72%	1.36%	10.35%	2.96%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

No corrections necessary at this time.

18-214

Substation Name and Number WEST NICHOLASVILLE 2 18
 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) 11.0
 2017 Member Count 683
 5 Year Average Member Count 675
 Date of Last Trim December-15
 Date of Next Trim 2021

5 Year Average		2017	
SAIDI	SAIFI	SAIDI	SAIFI
5.985645875	0.092497351	7.588579795	0.105417277

Total Minutes/Frequency	20190.00	312.0000	5183.00	72.0000
Equipment Fault	66.42%	55.45%	51.17%	23.61%
Wind	0.00%	0.00%	0.00%	0.00%
Small Animal	9.84%	12.18%	23.25%	29.17%
Squirrel	11.08%	17.63%	25.58%	47.22%
Unknown Cause	8.76%	10.90%	0.00%	0.00%
Deterioration	0.00%	0.00%	0.00%	0.00%
Scheduled	0.00%	0.00%	0.00%	0.00%
Power Supplier	0.00%	0.00%	0.00%	0.00%
Bird	0.00%	0.00%	0.00%	0.00%
Overload	0.00%	0.00%	0.00%	0.00%
Public Accident	0.00%	0.00%	0.00%	0.00%
Ice/Snow	0.00%	0.00%	0.00%	0.00%
Fire	0.00%	0.00%	0.00%	0.00%
Sag/Clearance	0.00%	0.00%	0.00%	0.00%
Tree - ROW	0.51%	0.96%	0.00%	0.00%
Lightning	3.40%	2.88%	0.00%	0.00%
Tree - Non ROW	0.00%	0.00%	0.00%	0.00%
Large Animal	0.00%	0.00%	0.00%	0.00%
Vandalism	0.00%	0.00%	0.00%	0.00%
Contractor	0.00%	0.00%	0.00%	0.00%
Flash Flood	0.00%	0.00%	0.00%	0.00%
	100%	100%	100%	100%

Corrections to be made:

Equipment repaired at time of outage. No corrections necessary at this time.



DISTRIBUTION RIGHT-OF-WAY VEGETATION MANAGEMENT 2018 PLAN/ 2017 PLAN REVIEW

April 2018

Blue Grass Energy Vegetation Management Plan

2017 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 2017.

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.

2015-2018 Vegetation Management Strategy

SCHEDULED MAINTENANCE AND CLEARANCE

Blue Grass Energy provides electric service to over 57,000 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 18 distribution circuits scheduled in 2017 for a total of 736 miles of distribution line. In 2018, there are 27 distribution circuits, for a total of 658 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	2015	2016	2017	2018
Scheduled	718	796	736	658
Completed	712	796	736	TBD

Of the 2015 & 2016 maintenance year mileage, 16 circuits consisting of 731 miles were identified for selective herbicide application and completed in 2017. Herbicide application of 18 circuits

consisting of 731 miles from the 2016 & 2017 maintenance years are scheduled to be completed in 2018.

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

Maintenance Year - Herbicide	2016	2017	2018
Scheduled	591	816	731
Completed	591	816	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 2017 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 2018 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	2013	2014	2015	2016	2017
TOTALS	65	91	77	86	110

†Outages on primary conductor excluding major event days

2017 VEGETATION MANAGEMENT PLAN REVIEW

No Changes were implemented in 2017 to the ROW management plan. The “Distribution Right-Of-Way Vegetation Management Plan” Dated January 2017 reiterated in detail the processes that were built into the plan.

In 2017, all scheduled mileage was completed within the 2017 calendar year.

Listed below are some of the processes used in 2017:

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.

2018 VEGETATION MANAGEMENT PLAN

In addition to continuing the Distribution Right-Of-Way Vegetation Management Plans outlined for 2017 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.

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