



Farmers Rural Electric Cooperative Corporation

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PUBLIC SERVICE
COMMISSION

April 25, 2016

Executive Director
Kentucky Public Service Commission
P O Box 615
211 Sower Blvd.
Frankfort, KY 40602-0615

Dear Sir or Madam:


Please find an original paper copy and an electronic version of Farmers Rural Electric's 2015 Distribution Reliability Report pursuant to the May 30, 2013 Order and the April 1, 2014 Order pertaining to Administrative Case No. 2011-00450.

If there are any questions or any further information needed Please contact me.

Sincerely,

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A Touchstone Energy® Cooperative 

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	Farners Rural Electric Cooperative
REPORT PREPARED BY	Tony Wells
E-MAIL ADDRESS OF PREPARER	twells@farmersrecc.com
PHONE NUMBER OF PREPARER	270-651-2191 Ext 8200

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2015
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SECTION 3: MAJOR EVENT DAYS

T_{MED}	20.9
FIRST DATE USED TO DETERMINE T_{MED}	5/1/2010
LAST DATE USED TO DETERMINE T_{MED}	12/31/2014
NUMBER OF MED IN REPORT YEAR	1

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	24192	TOTAL CIRCUITS	59
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Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	213.52	SAIDI	149.66
SAIFI	1.9	SAIFI	1.67

Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	254.66	SAIDI	175.11
SAIFI	2.1	SAIFI	2.17

Notes:

- 1) All duration indices (SAIDI, CAIDI) 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, CAIDI, and T_{MED}

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 5: CIRCUIT REPORTING

(CIRCUIT WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT #1

1. SUBSTATION NAME AND NUMBER

Goodnight (1)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 31 E - Goodnight Community

3. CIRCUIT NAME AND NUMBER

Rock Quarry (4)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Goodnight to Cave City along Hwy 90

5. TOTAL CIRCUIT MILES (MILES)

49.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

452

7. DATE OF LAST CIRCUIT TRIM (VM)

Before 2009

**8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE
NUMBERS REPRESENTED BY EACH CAUSE**

Equipment Failure	85.67%
Public	13.84%
Weather	0.42%
Planned	0.08%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

84.94

10. REPORTING YEAR (SAIDI)

477.27

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

5.62

12. REPORTING YEAR (SAIFI)

5.45

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

Conductor Change projects will be added to the next Construction Work Plan to replace aged #4ACSR

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CIRCUIT #2

1. SUBSTATION NAME AND NUMBER

Munfordville (2)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart Co., Hwy 31-W, Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Seymour (1)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Munfordville - Hwy 357 - Northeast of Munfordville

5. TOTAL CIRCUIT MILES (MILES)

112

6. CUSTOMER COUNT FOR THIS CIRCUIT

482

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Weather	31.65%
Equipment Failure	29.17%
Planned	18.04%
On R/W	14.50%
Off R/W	3.80%
Unknown	2.79%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

205.84

10. REPORTING YEAR (SAIDI)

275.34

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

8.27

12. REPORTING YEAR (SAIFI)

2.72

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

All taps on 3 phase were fused in 2015/2016 - Completed

Circuit has been reconfigured to now feed out of Jonesville Substation.

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CIRCUIT #3

1. SUBSTATION NAME AND NUMBER

Munfordville (2)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart Co., Hwy 31-W, Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Cub Run (6)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Munfordville to Cub Run and Wax, Hwy 88

5. TOTAL CIRCUIT MILES (MILES)

176.43

6. CUSTOMER COUNT FOR THIS CIRCUIT

1632

7. DATE OF LAST CIRCUIT TRIM (VM)

2009

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

On R/W	70.79%
Equipment Failure	13.29%
Weather	7.54%
Unknown	3.69%
Small Animal	1.91%
Off R/W	1.60%
Planned	0.90%
Public	0.17%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

157.9

10. REPORTING YEAR (SAIDI)

196.89

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

5.01

12. REPORTING YEAR (SAIFI)

2.7

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

Yard Trees was a major contributor to the R/W outages. A pilot has been undertaken to test a TGR(tree growth retardant) on this circuit.

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CIRCUIT #4

1. **SUBSTATION NAME AND NUMBER**
Munfordville (2)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Hart Co., Hwy 31-W, Munfordville, KY
3. **CIRCUIT NAME AND NUMBER**
Industrial Ckt (7)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Munfordville, Hwy 31-W, Industrial park near substation
5. **TOTAL CIRCUIT MILES (MILES)**
0.22
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
4
7. **DATE OF LAST CIRCUIT TRIM (VM)**
N/A
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Equipment Failure	69.40%
Planned	30.60%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
5.58
10. **REPORTING YEAR (SAIDI)**
108.33
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
0.2
12. **REPORTING YEAR (SAIFI)**
1.62
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
None taken or to be taken. One unplanned outage caused circuit to break criteria

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #5

1. **SUBSTATION NAME AND NUMBER**
Temple Hill (3)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Barren Co., Hwy 163, Temple Hill
3. **CIRCUIT NAME AND NUMBER**
Green Valley (2)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Temple Hill, Hwy 163, North on Hwy 163 towards Morrison Park
5. **TOTAL CIRCUIT MILES (MILES)**
19.0
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
164
7. **DATE OF LAST CIRCUIT TRIM (VM)**
Before 2009
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Equipment Failure	85.48%
Planned	14.52%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
113.60
10. **REPORTING YEAR (SAIDI)**
309.86
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
3.36
12. **REPORTING YEAR (SAIFI)**
1.98
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
None taken or to be taken. One unplanned outage caused circuit to break criteria

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #6

1. **SUBSTATION NAME AND NUMBER**
Knob Lick (4)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Metcalfe County - Hwy 70 - Knob Lick
3. **CIRCUIT NAME AND NUMBER**
Edmonton (2)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Knob Lick to Edmonton, Hwy 1243 and Hwy 80
5. **TOTAL CIRCUIT MILES (MILES)**
158.00
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
974
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2010
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Animal	43.45%
Off R/W	23.70%
Weather	16.13%
On R/W	5.84%
Public	4.61%
Unknown	4.60%
Equipment Failure	0.89%
Planned	0.79%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
128.70
10. **REPORTING YEAR (SAIDI)**
491.55
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
5.7
12. **REPORTING YEAR (SAIFI)**
3.09
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
Multiple projects were completed on this circuit during 2015. Single Phase to three phase at Clark's Corner area. Single phase to three phase along hwy 68--80, Fuses were added on three phase to the end of the three phase. CSP transformers were changed to conventional up to first sectionalizing device on three phase.

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CIRCUIT #7

1. SUBSTATION NAME AND NUMBER

Knob Lick (4)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Metcalfe County - Hwy 70 - Knob Lick

3. CIRCUIT NAME AND NUMBER

Wisdom (5)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Knob Lick to Wisdom, Hwy 640

5. TOTAL CIRCUIT MILES (MILES)

28.31

6. CUSTOMER COUNT FOR THIS CIRCUIT

139

7. DATE OF LAST CIRCUIT TRIM (VM)

2013

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

On R/W	45.70%
Equipment Failure	22.17%
Weather	20.66%
Off R/W	10.73%
Other	0.39%
Unknown	0.35%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

67.88

10. REPORTING YEAR (SAIDI)

133.28

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2.93

12. REPORTING YEAR (SAIFI)

1.18

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

CSP transformers were changed to conventional on three phase.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #8

1. SUBSTATION NAME AND NUMBER

Beckton (5)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 1297 - Beckton

3. CIRCUIT NAME AND NUMBER

Rocky Hill - Barren River State Park (2)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Beckton, Rocky Hill, Finney - Hwy 252, Beckton-Rocky Hill Rd - Barren River State Pk

5. TOTAL CIRCUIT MILES (MILES)

109.79

6. CUSTOMER COUNT FOR THIS CIRCUIT

1141

7. DATE OF LAST CIRCUIT TRIM (VM)

2015-2016

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

On R/W	33.65%
Planned	26.30%
Weather	17.65%
Off R/W	12.63%
Public	3.70%
Equipment Failure	2.45%
Unknown	1.97%
Animal	0.99%
Other	0.66%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

122.83

10. REPORTING YEAR (SAIDI)

185.88

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

6.51

12. REPORTING YEAR (SAIFI)

2.01

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

All taps on 3 phase will be fused in 2015 - Completed

Sectionalizing study will be performed and implemented in 2015

Numerous lightning arrestors will be added to line in 2015 - Completed

R/W completed 4th qtr 2015 and 1st qtr 2016

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #9

1. SUBSTATION NAME AND NUMBER

Cave City (6)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 90 - Cave City

3. CIRCUIT NAME AND NUMBER

Mammoth Cave (1)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Cave City, Hwy 70/90, Cave City to Mammoth Cave

5. TOTAL CIRCUIT MILES (MILES)

64

6. CUSTOMER COUNT FOR THIS CIRCUIT

677

7. DATE OF LAST CIRCUIT TRIM (VM)

2011

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Weather	48.46%
Equipment Failure	45.26%
Planned	4.77%
Unknown	1.00%
Animal	0.07%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

45.49

10. REPORTING YEAR (SAIDI)

111.94

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2.56

12. REPORTING YEAR (SAIFI)

1.59

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. 2 Outages caused circuit to break criteria. One was a broken insulator and the other was lightning damaged poletop.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #10

1. **SUBSTATION NAME AND NUMBER**
Cave City (6)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Barren County - Hwy 90 - Cave City
3. **CIRCUIT NAME AND NUMBER**
Cave City (2)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Cave City, Hwy 70/90, I-65 interchange
5. **TOTAL CIRCUIT MILES (MILES)**
3.47
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
34
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2011
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Animal	30.55%
Weather	25.54%
Equipment Failure	43.91%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
5.46
10. **REPORTING YEAR (SAIDI)**
11.06
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
0.2
12. **REPORTING YEAR (SAIFI)**
0.13
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
None. Small circuit and 3 outages total broke criteria

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #11

1. SUBSTATION NAME AND NUMBER

Galloway (8)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Metcalfe County, Hwy 68-80, Edmonton

3. CIRCUIT NAME AND NUMBER

Edmonton (1)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Edmonton, Hwy 68-80, Serves the city of Edmonton and surrounding area

5. TOTAL CIRCUIT MILES (MILES)

53.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

544

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Equipment Failure	31.51%
Planned	25.26%
On R/W	16.09%
Public	12.84%
Weather	11.35%
Animal	2.65%
Unknown	0.29%
Other	0.02%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

87.25

10. REPORTING YEAR (SAIDI)

137.75

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

3.79

12. REPORTING YEAR (SAIFI)

2.24

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. Planned outages for voltage conversion and single phase to 3 phase upgrade and one equipment failure outage associated with the upgrades broke criteria.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #12

1. **SUBSTATION NAME AND NUMBER**
Bonnieville (9)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Hart County, Hwy 31-W, Bonnieville
3. **CIRCUIT NAME AND NUMBER**
Priceville (1)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Bonnieville, Hwy 728, Priceville - Lone Star
5. **TOTAL CIRCUIT MILES (MILES)**
44.0
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
330
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2008
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

R/W	92.94%
Equipment Failure	3.03%
Weather	2.16%
Planned	1.34%
Unknown	0.31%
Animal	0.22%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
180.58
10. **REPORTING YEAR (SAIDI)**
296.67
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
5.85
12. **REPORTING YEAR (SAIFI)**
1.70
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
R/W will be cleared in 2016.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #13

1. SUBSTATION NAME AND NUMBER

Bonnieville (9)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart County, Hwy 31-W, Bonnieville

3. CIRCUIT NAME AND NUMBER

Munfordville (2)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Bonnieville - Munfordville - Hwy 31-W - Along 31-W and Pine ridge Hll

5. TOTAL CIRCUIT MILES (MILES)

51.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

345

7. DATE OF LAST CIRCUIT TRIM (VM)

2008

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Equipment Failure	62.63%
On R/W	10.93%
Off R/W	6.93%
R/W Contractor	1.60%
Weather	8.28%
Public	9.17%
Other	0.09%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

163.26

10. REPORTING YEAR (SAIDI)

285.84

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

4.90

12. REPORTING YEAR (SAIFI)

2.42

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. One LA failure at substation with bad weather and traffic extending outage.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #14

1. **SUBSTATION NAME AND NUMBER**
Fox Hollow (12)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Barren County - Hwy 63 - Glasgow, KY
3. **CIRCUIT NAME AND NUMBER**
Roseville (1)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Glasgow - Roseville Rd - Roseville Rd from Glasgow to Roseville
5. **TOTAL CIRCUIT MILES (MILES)**
88.0
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
432
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2015
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Equipment Failure	65.19%
Animal	18.44%
Public	7.08%
Weather	6.38%
On R/W	2.57%
Planned	0.33%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
177.94
10. **REPORTING YEAR (SAIDI)**
348.78
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
9.08
12. **REPORTING YEAR (SAIFI)**
2.37
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
None. One outage (a damage poletop) caused circuit to fail criteria.

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #15

1. **SUBSTATION NAME AND NUMBER**
Fox Hollow (12)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Barren County - Hwy 63 - Glasgow, KY
3. **CIRCUIT NAME AND NUMBER**
Green Valley (2)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Glasgow, KY - Hy 90 - Green Valley
5. **TOTAL CIRCUIT MILES (MILES)**
58.2
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
774
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2013
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Weather	51.01%
On R/W	41.84%
Animal	4.82%
Unknown	1.43%
Planned	0.67%
Public	0.24%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
82.75
10. **REPORTING YEAR (SAIDI)**
180.83
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
3.11
12. **REPORTING YEAR (SAIFI)**
2.41
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
Right of way to be cleared in 2016.

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CIRCUIT #16

1. SUBSTATION NAME AND NUMBER

Bon Ayr (16)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 68-80 - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

Park City (3)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Park City, KY - Bon Ayr - Park City Rd - Park City

5. TOTAL CIRCUIT MILES (MILES)

53.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

399

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Equipment Failure	72.45%
Weather	14.35%
On R/W	10.05%
Animal	1.85%
Planned	1.29%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

15.22

10. REPORTING YEAR (SAIDI)

23.22

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.42

12. REPORTING YEAR (SAIFI)

0.23

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. New substation brought online in 2013 atill establishing average. Average SAIDI over 2 yr

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #17

1. **SUBSTATION NAME AND NUMBER**
Bon Ayr (16)
2. **SUBSTATION LOCATION (COUNTY-ROAD-TOWN)**
Barren County - Hwy 68-80 - Glasgow, KY
3. **CIRCUIT NAME AND NUMBER**
Merry Oaks (4)
4. **CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)**
Merry Oaks - Hwy 68-80
5. **TOTAL CIRCUIT MILES (MILES)**
23.9
6. **CUSTOMER COUNT FOR THIS CIRCUIT**
278
7. **DATE OF LAST CIRCUIT TRIM (VM)**
2014
8. **LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE**

Planned	27.01%
Public	24.62%
Weather	23.20%
Animal	15.29%
Off R/W	9.07%
Equipment Failure	0.81%
9. **CIRCUIT 5 YEAR AVERAGE (SAIDI)**
1.51
10. **REPORTING YEAR (SAIDI)**
18.24
11. **CIRCUIT 5 YEAR AVERAGE (SAIFI)**
0.04
12. **REPORTING YEAR (SAIFI)**
0.33
13. **LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN**
None. New substation brought online in 2013 atill establishing average. Average SAIDI over 2 yr

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CIRCUIT #18

1. SUBSTATION NAME AND NUMBER

Jonesville (17)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart County - Hwy 357 - Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Jonesville (2)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Jonesville, KY - Hwy 936 , Aetna Furnace Rd - Jonesville

5. TOTAL CIRCUIT MILES (MILES)

100.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

611

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Equipment Failure	42.06%
On R/W	31.73%
Public	19.71%
Off R/W	7.99%
Weather	3.49%
Planned	2.73%
Animal	0.29%
Unknown	0.06%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

113.09

10. REPORTING YEAR (SAIDI)

195.92

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.36

12. REPORTING YEAR (SAIFI)

1.79

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. New substation brought online in 2014 atill establishing average. Average SAIDI over 1 yr

KENTUCKY PUBLIC SERVICE COMMISSION

CIRCUIT #19

1. SUBSTATION NAME AND NUMBER

Jonesville (17)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart County - Hwy 357 - Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Seymour (3)

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)

Munfordville to Canmer - Hwy 357, Hwy 31-E - Hwy 357 to east of Canmer

5. TOTAL CIRCUIT MILES (MILES)

122.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

668

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

8. LIST OUTAGE FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Weather	96.21%
Planned	3.11%
Equipment Failure	0.46%
Unknown	0.22%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.00

10. REPORTING YEAR (SAIDI)

142.50

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.00

12. REPORTING YEAR (SAIFI)

0.76

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None. New substation brought online in 2014 atill establishing average Average SAIDI over 1 yr

KENTUCKY PUBLIC SERVICE COMMISSION

Circuit reconfigured during 2015.

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

KENTUCKY PUBLIC SERVICE COMMISSION

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SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

Farmers RECC Vegetation Management Plan for 2016

Farmers RECC will be committed to its members by providing safe reliable electricity. For 2016 we have contracted with Environmental Consultants Inc. (ECI) to help oversee and manage our Right-Of-Way program.

In 2016 we have started work on work on five circuits. We have contracted with A&G Tree Service to clear the following circuits.

- Beckton – Rocky Hill / State Park has 112 miles of line.
- Fox Hollow – Green Valley has 57 miles of line.
- Galloway – Edmonton has 53 miles of line.
- Parkway – Haywood has 47 miles of line.
- Bonnieville – Priceville has 43 miles of line.

Total Miles = 312

We also have two A&G crews working hot spots & yard tress. They are cutting Right Of – Way for new work orders.

We have contracted with Sage for Herbicide spraying that will include several miles of line which will include the following circuits.

- Beckton – Rocky Hill / State Park has 110 miles of line.
- Munfordville – Seymour has 112 miles of line.
- Munfordville – Priceville has 84 miles of line.
- Bonnieville – Munfordville has 50 miles of line.
- Goodnight – Rock Quarry has 49 miles of line.
- Goodnight – Hiseville has 75 miles of line.
- Goodnight – Country Club has 15 miles of lines.

Total Miles = 495

By implementing this work plan we can keep our commitment to our members and provide a safe reliable service.

- Bonnieville – Munfordville has 50 miles of line.
- Goodnight – Rock Quarry has 49 miles of line.
- Goodnight – Hiseville has 75 miles of line.
- Goodnight – Country Club has 15 miles of lines.

Total Miles = 495

By implementing this work plan we can keep our commitment to our members and provide a safe reliable service.

Circuit comparison based on 4 years of history instead of 5. 5 years of data not available in the OMS.