

Farmers Rural Electric Cooperative Corporation

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RECEIVED

March 29, 2019

APR 01 2019

PUBLIC SERVICE COMMISSION

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

Dear Ms. Pinson:

Please find an original paper copy and an electronic version of Farmers Rural Electric's 2018 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,

Tony Wells

VP Member and Corporate Services

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Glasgow KY, 42141

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Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME
REPORT PREPARED BY

E-MAIL ADDRESS OF PREPARER
PHONE NUMBER OF PREPARER

Tony Wells

twells@farmersrecc.com
270-651-2191 Ext 8200

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT 2018

SECTION 3: MAJOR EVENT DAYS

T_{MED} 12.78

FIRST DATE USED TO DETERMINE T_{MED} 1/1/2013

LAST DATE USED TO DETERMINE T_{MED} 12/31/2017

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 25455 TOTAL CIRCUITS 62

Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	159.66	SAIDI	82.38	
SAIFI	1.65	SAIFI	0.89	

Including MED

	5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	200.04	SAIDI	144.01	
SAIFI	1.93	SAIFI	1.06	

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}

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

Temple Hill (3)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren Co., Hwy 163, Temple Hill

3. CIRCUIT NAME AND NUMBER

Etoile (4)

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

Etoile, crossing multiple rds serving towards Barren River State Park

5. TOTAL CIRCUIT MILES (MILES)

18

6. CUSTOMER COUNT FOR THIS CIRCUIT

110

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

 Off R/W
 83.39%

 On R/W
 13.58%

 Planned
 2.50%

 Weather
 0.53%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

170.55

10. REPORTING YEAR (SAIDI)

374.75

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.69

12. REPORTING YEAR (SAIFI)

1.47

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

None taken or to be taken. One circuit level outage broke criteria and circuit has been reconfigured.

CIRCUIT #2

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

Roseville (5)

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

Temple Hill - Hwy 63

5. TOTAL CIRCUIT MILES (MILES)

6.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

32

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

 Unknown
 60.29%

 Planned
 28.16%

 Weather
 11.55%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

148.94

10. REPORTING YEAR (SAIDI)

183.96

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.64

12. REPORTING YEAR (SAIFI)

1.46

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

None taken or to be taken. Only 4 total outages. New configuration very small circuit

CIRCUIT #3

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

Temple Hill (6)

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

Temple Hill - Hwy 63

5. TOTAL CIRCUIT MILES (MILES)

34.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

265

7. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

 Equipment Failure
 84.34%

 Weather
 7.90%

 Planned
 4.58%

 Animal
 2.57%

 On R/W
 0.62%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

73.64

10. REPORTING YEAR (SAIDI)

74.19

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.52

12. REPORTING YEAR (SAIFI)

0.76

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

None taken or to be taken. One outage was 84% of outage time.

CIRCUIT #4

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

Hiseville (3)

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

Knob Lick to Hiseville - Hwy 70

5. TOTAL CIRCUIT MILES (MILES)

22.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

175

7. DATE OF LAST CIRCUIT TRIM (VM)

Planned 2019

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

Weather 66.98%
On R/W 20.26%
Equipment Failure 9.00%
Public 3.76%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

96.01

10. REPORTING YEAR (SAIDI)

65.29

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.84

12. REPORTING YEAR (SAIFI)

1.46

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

None taken or to be taken. Small number of outages and did not break hours criteria.

CIRCUIT #5

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)

27.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

139

7. DATE OF LAST CIRCUIT TRIM (VM)

Planned 2019

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

On R/W 72.03% Weather 22.08% Planned 4.06% Unknown 1.83%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

91.56

10. REPORTING YEAR (SAIDI)

119.30

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.07

12. REPORTING YEAR (SAIFI)

0.85

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

None taken or to be taken. One outage was 68% of outage time and R/W is planned to to be cut in 2019

CIRCUIT #6

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

Park City (5)

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

Cave City, Hwy 31-W, Cave City - Park City

5. TOTAL CIRCUIT MILES (MILES)

22.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

424

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

On R/W	75.76%
Planned	10.99%
Animal	6.04%
Unknown	3.02%
Weather	2.57%
Equipment Failure	1.62%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

25.11

10. REPORTING YEAR (SAIDI)

53.76

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.29

12. REPORTING YEAR (SAIFI)

0.68

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

None taken or to be taken. Only 4 outages that were not planned or Major Event day.

CIRCUIT #7

1. SUBSTATION NAME AND NUMBER

Parkway (7)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 31E - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

Idea Park (1)

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

Glasgow, KY - Idea Industrial Park - South of Glasgow, KY

5. TOTAL CIRCUIT MILES (MILES)

1.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

10

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

On R/W

100.0%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

55.8

10. REPORTING YEAR (SAIDI)

156.3

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.4

12. REPORTING YEAR (SAIFI)

2.1

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

None taken or to be taken, very short industrial circuit

CIRCUIT #8

1. SUBSTATION NAME AND NUMBER

Parkway (7)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 31E - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

Pritchardsville (2)

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

Glasgow, KY - Pritchardsville, South Fork Rd - South of Glasgow, KY

5. TOTAL CIRCUIT MILES (MILES)

19.8

6. CUSTOMER COUNT FOR THIS CIRCUIT

408

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

On R/W	84.66%
Animal	5.70%
Planned	4.73%
Weather	1.96%
Unknown	1.18%
Off R/W	0.92%
Public	0.55%
Equipment Failure	0.30%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

90.75

10. REPORTING YEAR (SAIDI)

54.37

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.71

12. REPORTING YEAR (SAIFI)

1.22

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

None taken or to be taken. One outage accounted for 81% of outage time.

CIRCUIT #9

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 surronding area

5. TOTAL CIRCUIT MILES (MILES)

175.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

1332

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

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

Off R/W	31.67%
On R/W	26.67%
Weather	19.66%
Equipment Failure	8.27%
R/W Contractor	4.03%
Animal	3.56%
Planned	2.69%
Other	2.31%
Unknown	0.67%
Public	0.47%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

104.35

10. REPORTING YEAR (SAIDI)

121.26

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.36

12. REPORTING YEAR (SAIFI)

2.02

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

None taken or to be taken. This circuit was trimmed in 2018.

CIRCUIT #10

1. SUBSTATION NAME AND NUMBER

Galloway (8)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Metcalfe County, Hwy 68-80, Edmonton

3. CIRCUIT NAME AND NUMBER

Wisdom (2)

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

Edmonton, Hwy 68-80 - Hwy 640, Wisdom and Randolph

5. TOTAL CIRCUIT MILES (MILES)

109.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

837

7. DATE OF LAST CIRCUIT TRIM (VM)

2011

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

Planned	44.10%
Animal	16.36%
On R/W	12.48%
Equipment Failure	11.64%
Off R/W	5.50%
Weather	5.29%
Unknown	4.27%
Public	0.35%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

111.49

10. REPORTING YEAR (SAIDI)

140.48

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.18

12. REPORTING YEAR (SAIFI)

1.22

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

This circuit is scheduled to be trimmed in 2019. 44% of outage time was due to a voltage conversion.

CIRCUIT #11

1. SUBSTATION NAME AND NUMBER

Galloway (8)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Metcalfe County - Hwy 68-80 - Edmonton, KY

3. CIRCUIT NAME AND NUMBER

Old Hwy 68-80 (3)

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

Edmonton, KY - Old Hwy 68-80

5. TOTAL CIRCUIT MILES (MILES)

0.93

6. CUSTOMER COUNT FOR THIS CIRCUIT

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

Animal

100.0%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

6.77

10. REPORTING YEAR (SAIDI)

25.53

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

12. REPORTING YEAR (SAIFI)

0.41

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

None taken or to be taken. Circuit has experienced 2 outages in 4 years

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

353

7. DATE OF LAST CIRCUIT TRIM (VM)

2016

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

On R/W	41.18%
Weather	30.33%
Off R/W	24.21%
Unknown	3.37%
Planned	0.42%
Equipment Failure	0.34%
Other	0.2%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

151.84

10. REPORTING YEAR (SAIDI)

322.71

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.86

12. REPORTING YEAR (SAIFI)

1.68

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

Will inspect line to determine the effectiveness of trimming in 2016 and then develop necessary course of action.

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)

49.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

369

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

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

On R/W	79.83%
Weather	15.54%
Equipment Failure	3.28%
Public	0.93%
Planned	0.39%
Unknown	0.03%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

187.78

10. REPORTING YEAR (SAIDI)

221.64

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.46

12. REPORTING YEAR (SAIFI)

0.74

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

Will inspect line to determine the effectiveness of trimming in 2015 and then develop necessary course of action.

CIRCUIT #14

1. SUBSTATION NAME AND NUMBER

West Glasgow (10)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County, Donnelly Drive, Glasgow

3. CIRCUIT NAME AND NUMBER

(1) Bowling Green Rd

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

Glasgow - Bowling Green Rd (hwy 68-80) and Oil City Rd - West of Glasgow

5. TOTAL CIRCUIT MILES (MILES)

31.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

300

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

Public	85.7%
On R/W	4.5%
Planned	4.4%
Weather	2.2%
Unknown	2.0%
Animal	0.9%
Equipment Failure	0.2%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

67.96

10. REPORTING YEAR (SAIDI)

108.21

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.82

12. REPORTING YEAR (SAIFI)

0.67

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

None taken or to be taken. Public outages was 86% of outages

CIRCUIT #15

1. SUBSTATION NAME AND NUMBER

West Glasgow (10)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County, Donnelly Drive, Glasgow

3. CIRCUIT NAME AND NUMBER

Old Bowling Green Rd (2)

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

Glasgow - Hwy 1297 - Towards Beckton

5. TOTAL CIRCUIT MILES (MILES)

8.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

97

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 73.70%
Off R/W 14.29%
Public 7.67%
On R/W 3.68%
Weather 0.66%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

92.33

10. REPORTING YEAR (SAIDI)

41.03

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.17

12. REPORTING YEAR (SAIFI)

1.18

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

None taken or to be taken. 1 outage was 74% of outage time and only 5 outages total

CIRCUIT #16

1. SUBSTATION NAME AND NUMBER

Seymour (11)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart County - Hwy 218 - Horse Cave, KY

3. CIRCUIT NAME AND NUMBER

(3) Bearwallow

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

Seymour - Highway 218 towards the Bearwallow community

5. TOTAL CIRCUIT MILES (MILES)

12.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

98

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

 Weather
 48.91%

 On R/W
 46.23%

 Public
 4.38%

 Unknown
 0.48%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

74.48

10. REPORTING YEAR (SAIDI)

114.84

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.61

12. REPORTING YEAR (SAIFI)

1.15

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

None taken or to be taken. Only 10 outages total

CIRCUIT #17

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)

37.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

453

7. DATE OF LAST CIRCUIT TRIM (VM)

2015

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

 Power Supply
 50.86%

 Unknown
 45.51%

 Planned
 3.34%

 On R/W
 0.24%

 Weather
 0.06%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

178.35

10. REPORTING YEAR (SAIDI)

116.79

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.80

12. REPORTING YEAR (SAIFI)

2.09

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

None taken or to be taken. 50% of outage time was power supplier.

CIRCUIT #18

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 (4)

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

Glasgow, KY - Hy 90 - Green Valley

5. TOTAL CIRCUIT MILES (MILES)

25.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

403

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 40.89% Unknown 16.77% Equipment Failure 15.04% Animal 13.69% Public 9.90% Planned 3.72%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

14.36

10. REPORTING YEAR (SAIDI)

53.35

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.2

12. REPORTING YEAR (SAIFI)

0.70

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

None taken or to be taken. New circuit, establishing 5 yr average.

CIRCUIT #19

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

Beckton (2)

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

Glasgow, KY - Hwy 685 - Beckton

5. TOTAL CIRCUIT MILES (MILES)

7.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

62

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

Tree off- RW

100.0%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

17.8

10. REPORTING YEAR (SAIDI)

24.3

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.27

12. REPORTING YEAR (SAIFI)

0.20

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

None taken or to be taken. Off R/W tree

CIRCUIT #20

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)

51.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

405

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

 Weather
 35.08%

 Public
 24.39%

 Equipment Failure
 22.98%

 Off R/W
 8.92%

 On R/W
 4.46%

 Planned
 4.16%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

35.80

10. REPORTING YEAR (SAIDI)

134.69

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.33

12. REPORTING YEAR (SAIFI)

1.89

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

None taken or to be taken. Planned and Public accounted for 29% and 1 outage accounted for 33% of outage time.

CIRCUIT #21

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)

23.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

293

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

 Weather
 61.00%

 Off R/W
 15.05%

 Unknown
 10.52%

 Planned
 6.18%

 Equipment Failure
 4.31%

 On R/W
 2.94%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

11.64

10. REPORTING YEAR (SAIDI)

127.87

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.14

12. REPORTING YEAR (SAIFI)

1.10

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

None taken or to be taken. Only 4 years in calculating average. 2 outages were 60% of outage time

CIRCUIT #22

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)

117.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

657

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	40.83%
Equipment Failure	29.30%
On R/W	16.42%
Off R/W	9.82%
Planned	2.03%
Public	1.31%
Unknown	0.28%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

129.02

10. REPORTING YEAR (SAIDI)

115.26

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.82

12. REPORTING YEAR (SAIFI)

0.88

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

None taken or to be taken. New substation brought online in 2014 still establishing 5yr average. This circuit didn't pick up load till 2015.

CIRCUIT #23

1. SUBSTATION NAME AND NUMBER

Roseville (18)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Roseville Rd - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

Etoile (1)

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

Roseville to Etoile, Cooktown - Roseville Rd, Payne Mill Rd, Etoile

5. TOTAL CIRCUIT MILES (MILES)

110.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

597

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Equipment Failure	29.74%
On R/W	26.91%
Off R/W	24.28%
Animal	5.02%
Planned	4.64%
weather	4.13%
Unknown	2.75%
Public	2.52%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

12.42

10. REPORTING YEAR (SAIDI)

234.09

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2.48

12. REPORTING YEAR (SAIFI)

1.66

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

CIRCUIT #24

1. SUBSTATION NAME AND NUMBER

Roseville (18)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Roseville Rd - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

(2) Barren River State Park

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

Etoile to Barren River State Park - Tobacco Rd, Hwy 31-E

5. TOTAL CIRCUIT MILES (MILES)

50.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

395

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

On R/W	70.34%
weather	14.25%
Off R/W	9.71%
Planned	3.98%
Animal	0.70%
Equipment Failure	0.64%
Unknown	0.38%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.00

10. REPORTING YEAR (SAIDI)

88.17

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.00

12. REPORTING YEAR (SAIFI)

0.83

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

CIRCUIT #25

1. SUBSTATION NAME AND NUMBER

Roseville (18)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Roseville Rd - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

(3) Glasgow

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

Roseville rd north out of sub.

5. TOTAL CIRCUIT MILES (MILES)

3.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

25

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Weather

100.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.00

10. REPORTING YEAR (SAIDI)

148.12

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.00

12. REPORTING YEAR (SAIFI)

1.20

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

CIRCUIT #26

1. SUBSTATION NAME AND NUMBER

Roseville (18)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Roseville Rd - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

(4) Temple Hill

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

Roseville to Temple Hill - Wells Rd, Mt Pleasant and Woods Store-Etoile

5. TOTAL CIRCUIT MILES (MILES)

32.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

214

7. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

 Weather
 0.657331

 Public
 0.181219

 Planned
 0.111409

 Animal
 0.031713

 On R/W
 1.83%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.00

10. REPORTING YEAR (SAIDI)

24.22

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.00

12. REPORTING YEAR (SAIFI)

0.35

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

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

Farmers RECC Vegetation Management Plan for 2019

Farmers RECC will be committed to its members by providing safe reliable electricity For 2019 we have contracted with Environmental Consultants Inc. (ECI) to help oversee and manage our Right-Of-Way program.

In 2019 we will work on the circuits listed below. We have contracted with A&G Tree Service and to clear the following circuits.

- Galloway Randolph has 110 miles of line
- Knob Lick Edmonton has 49 miles of line
- Knob Lick Hiseville has 22 miles of line
- Knob Lick Center has 113 miles of line
- Knob Lick Wisdom has 27 miles of line
- Knob Lick Sulphur Well has 97 miles of line
 Total Miles = 418 miles of line

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

We have contracted with Sage for Herbicide spraying on the following # circuits.

- Parkway Haywood has 47 miles of line
- Bonnieville Priceville has 43 miles of line
- Temple Hill Summershade has 126 miles of line
- Temple Hill Green Valley has 19 miles of line
- Temple Hill Clover Creek has 64 miles of line
- Temple Hill Temple Hill has 34 miles of line
- Beckton Rocky Hill has 105 miles of line
- Goodnight Country Club has 19 miles of line
- Galloway Edmonton has 174 miles of line

Total Miles = 630 miles of line

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

