

Farmers Rural Electric Cooperative Corporation

504 S. Broadway, Glasgow, KY 42141 • P.O. Box 1298, Glasgow, KY 42142 • (270) 651-2191 • Fax (270) 651-7332

April 21, 2020

RECEIVED

APR 22 2020

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

PUBLIC SERVICE COMMISSION

Dear Mr. Chandler:

Please find an original paper copy and an electronic version of Farmers Rural Electric's 2019 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

504 S Broadway St

Glasgow KY, 42141

Phone 270-651-2191 Ext 8200

Mobile 270-670-5299

Email twells@farmersrecc.com

Farmers RECC is an equal opportunity provider and employer.

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

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

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT

2019

SECTION 3: MAJOR EVENT DAYS

FIRST DATE USED TO DETERMINE T_{MED}
LAST DATE USED TO DETERMINE T_{MED}
NUMBER OF MED IN REPORT YEAR

10.51 1/1/2014 12/31/2018

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

SECTION 4: SYSTEM RELIABILITY INFORMATION AND RESULTS

System-wide Information

TOTAL CUSTOMERS 23957

accumulated.

TOTAL CIRCUITS

68

Excluding MED

5 YEAR AVERAGE		
SAIDI	139.49	
SAIFI	1.53	

 REPORTING YEAR

 SAIDI
 138.28

 SAIFI
 1.48

Including MED

5 YEAR AVERAGE		
SAIDI	166.46	
SAIFI	1 72	

 REPORTING YEAR

 SAIDI
 138.28

 SAIFI
 1.48

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

Goodnight (1)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 31 E - Goodnight Community

3. CIRCUIT NAME AND NUMBER

Lecta (2)

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

Goodnight Hwy 31E towards Glasgow - Tick Ridge Rd

5. TOTAL CIRCUIT MILES (MILES)

70.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

862

7. DATE OF LAST CIRCUIT TRIM (VM)

2011

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

On R/W	66.33%
Equipment Failure	27.17%
Planned	3.07%
Weather	1.29%
Unknown	1.05%
Public	0.79%
Animals	0.30%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

78.23

10. REPORTING YEAR (SAIDI)

193.18

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.71

12. REPORTING YEAR (SAIFI)

2.22

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

None taken or to be taken. Two outages were 80% of outage time.

CIRCUIT #2

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

Country Club Circuit (3)

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

Old Munfordville Rd and Backside of Country Club

5. TOTAL CIRCUIT MILES (MILES)

18.6 miles

6. CUSTOMER COUNT FOR THIS CIRCUIT

285

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	69.2%
Off R/W	15.4%
Weather	12.5%
Unknown	1.0%
Planned	0.8%
Equipment Failure	0.7%
Animals	0.3%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

93.57

10. REPORTING YEAR (SAIDI)

117.11

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.83

12. REPORTING YEAR (SAIFI)

1.30

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

None taken or to be taken.

CIRCUIT #3

1. SUBSTATION NAME AND NUMBER

Munfordville (2)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart Co., Hwy 357, Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Priceville (3)

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

Munfordville - Raider Hollow Rd - Northwest of Munfordville

5. TOTAL CIRCUIT MILES (MILES)

84.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

661

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	27.16%
Equipment Failure	24.60%
Public	18.12%
On R/W	14.25%
Planned	7.88%
Weather	4.16%
Animals	3.70%
Unknown	0.12%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

104.13

10. REPORTING YEAR (SAIDI)

159.69

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.73

12. REPORTING YEAR (SAIFI)

1.56

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

None taken or to be taken. Work plan items being completed this year.

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

Cub Run (6)

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

Munfordville to Cub Run and Wax, Hwy 88

5. TOTAL CIRCUIT MILES (MILES)

174.8

6. CUSTOMER COUNT FOR THIS CIRCUIT

1767

7. DATE OF LAST CIRCUIT TRIM (VM)

2010

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

Equipment Failure	48.33%
On R/W	32.93%
Off R/W	6.64%
Unknown	4.83%
Planned	3.80%
Weather	2.46%
Public	0.60%
Animals	0.42%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

185.1

10. REPORTING YEAR (SAIDI)

346.64

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.64

12. REPORTING YEAR (SAIFI)

2.88

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

None taken or to be taken. One series of outages with overloaded stepdowns has been resolved.

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)

18.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

175

7. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Weather 80.74% Unknown 13.24% Planned 5.71% Equipment Failure 0.3%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

98.05

10. REPORTING YEAR (SAIDI)

130.14

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.80

12. REPORTING YEAR (SAIFI)

1.32

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

CIRCUIT #6

1. SUBSTATION NAME AND NUMBER

Temple Hill (3)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 63 - Temple Hill

3. CIRCUIT NAME AND NUMBER

Glover Creek (3)

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

Temple Hill - Glover Creek Rd, Hwy 90 and Kino Rd - Temple Hill to Kino

5. TOTAL CIRCUIT MILES (MILES)

64.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

545

7. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Off R/W	83.82%
Public	6.30%
Unknown	5.55%
Planned	3.00%
On R/W	0.51%
Weather	0.43%
Equipment Failure	0.28%
Animals	0.10%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

93.66

10. REPORTING YEAR (SAIDI)

95.11

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1 04

12. REPORTING YEAR (SAIFI)

1.31

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

None taken or to be taken. One circuit level outage was 73% of outage time.

CIRCUIT #7

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)

17.7

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

On R/W	42.69%
Public	31.68%
Planned	21.47%
Equipment Failure	1.87%
Weather	1.70%
Animals	0.57%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

212.00

10. REPORTING YEAR (SAIDI)

251.57

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.57

12. REPORTING YEAR (SAIFI)

2.72

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

None taken or to be taken. Two outages was 74% of outage time.

CIRCUIT #8

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)

35.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

272

7. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Weather	74.98%
Public	9.02%
Equipment Failure	6.98%
Animals	5.74%
Unknown	1.67%
Off R/W	0.83%
Planned	0.77%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

85.04

10. REPORTING YEAR (SAIDI)

234.52

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.64

12. REPORTING YEAR (SAIFI)

2.66

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

None taken or to be taken. Two outages was 72% of outage time.

CIRCUIT #9

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

Sulphur Well(1)

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

Knob Lick to Sulphur Well - Hwy 70

5. TOTAL CIRCUIT MILES (MILES)

98.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

624

7. DATE OF LAST CIRCUIT TRIM (VM)

2013

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

Equipment Failure	73.34%
Unknown	13.09%
Planned	6.32%
Weather	2.93%
On R/W	2.60%
Contractor cut tree	1.43%
Public	0.27%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

177.00

10. REPORTING YEAR (SAIDI)

152.24

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.76

12. REPORTING YEAR (SAIFI)

2.32

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

None taken or to be taken. Currently working work plan items to replaced aged conductor on this circuit.

CIRCUIT #10

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

140

7. DATE OF LAST CIRCUIT TRIM (VM)

2013

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

Off R/W	77.87%
Weather	19.24%
Planned	2.74%
Public	0.14%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

109.21

10. REPORTING YEAR (SAIDI)

214.40

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.20

12. REPORTING YEAR (SAIFI)

1 44

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

None taken or to be taken. One outage was 78% of outage time for off R/W tree.

CIRCUIT #11

1. SUBSTATION NAME AND NUMBER

Beckton (5)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 1297 - Beckton

3. CIRCUIT NAME AND NUMBER

Glasgow (1)

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

Beckton - Glasgow - Hwy 1297

5. TOTAL CIRCUIT MILES (MILES)

18.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

162

7. DATE OF LAST CIRCUIT TRIM (VM)

Pre-2009

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

On R/W	51.45%
Equipment Failure	34.44%
Off R/W	7.34%
Weather	5.54%
Planned	1.23%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

93.64

10. REPORTING YEAR (SAIDI)

181.66

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.85

12. REPORTING YEAR (SAIFI)

2.89

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

None taken or to be taken. Three outages accounted for 84% of outage time. Will trim on normal cycle.

CIRCUIT #12

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)

109.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

1142

7. DATE OF LAST CIRCUIT TRIM (VM)

2016

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

Off R/W	59.90%
Weather	22.60%
Equipment Failure	9.20%
Unknown	3.25%
On R/W	2.26%
Planned	2.13%
Animals	0.60%
Public	0.06%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

169.51

10. REPORTING YEAR (SAIDI)

227.83

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1 00

12. REPORTING YEAR (SAIFI)

2.29

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

None taken or to be taken. One outage caused by Off R/W broke criteria and was 42%. of outage time

CIRCUIT #13

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

Goodnight (4)

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

Goodnight, Whitney Woods areas

5. TOTAL CIRCUIT MILES (MILES)

8.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

80

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

Animals	31.62%
Equipment Failure	26.42%
Off R/W	11.77%
On R/W	10.88%
Weather	10.12%
Unknown	6.41%
Planned	2.13%
Public	0.6%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

28.79

10. REPORTING YEAR (SAIDI)

417.33

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.41

12. REPORTING YEAR (SAIFI)

4.40

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

None taken or to be taken. System reconfigured during upgrades in area.

CIRCUIT #14

1. SUBSTATION NAME AND NUMBER

Parkway (7)

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Barren County - Hwy 31E - Glasgow, KY

3. CIRCUIT NAME AND NUMBER

Haywood (4)

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

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

5. TOTAL CIRCUIT MILES (MILES)

46.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

877

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	76.49%
Off R/W	19.32%
Planned	2.99%
Animals	0.75%
Unknown	0.27%
On R/W	0.18%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

42.22

10. REPORTING YEAR (SAIDI)

94.23

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.47

12. REPORTING YEAR (SAIFI)

1.17

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

None taken or to be taken. One outage was 76% of outage time.

CIRCUIT #15

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)

170.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

1345

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	65.10%
Weather	22.39%
On R/W	4.66%
Planned	3.37%
Equipment Failure	1.86%
Animals	1.07%
Contractor cut tree	0.95%
Unknown	0.53%
Public	0.07%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

114.35

10. REPORTING YEAR (SAIDI)

136.13

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.64

12. REPORTING YEAR (SAIFI)

1.32

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

None taken or to be taken. 65% of outage time was Off R/W trees

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)

12.3

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

 On R/W
 51.26%

 Off R/W
 22.08%

 Equipment Failure
 15.10%

 Planned
 8.66%

Weather 2.90%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

70.95

10. REPORTING YEAR (SAIDI)

108.63

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.72

12. REPORTING YEAR (SAIFI)

1.18

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

None taken or to be taken. Only 5 preventable 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

469

7. DATE OF LAST CIRCUIT TRIM (VM)

2013

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

Off R/W	56.13%
Weather	27.94%
On R/W	10.25%
Public	4.52%
Unknown	0.79%
Planned	0.25%
Equipment Failure	0.12%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

148.83

10. REPORTING YEAR (SAIDI)

107.98

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.61

12. REPORTING YEAR (SAIFI)

1.87

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

None taken or to be taken. 2 Outages were 74% of outage time.

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 (2)

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

Glasgow, KY - Hy 90 - Green Valley

5. TOTAL CIRCUIT MILES (MILES)

37.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

490

7. DATE OF LAST CIRCUIT TRIM (VM)

2016

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

Power Supply	88.47%
Unknown	4.18%
Planned	2.51%
Equipment Failure	2.00%
Weather	1.93%
On R/W	0.79%
Animals	0.12%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

117.47

10. REPORTING YEAR (SAIDI)

145.56

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.32

12. REPORTING YEAR (SAIFI)

1.31

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

None taken or to be taken. 1 outage was 88% of outages and power supply.

CIRCUIT #19

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)

25.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

407

7. DATE OF LAST CIRCUIT TRIM (VM)

2013

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

Animals

99.10%

Off R/W

0.88%

Planned

0.02%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

25.03

10. REPORTING YEAR (SAIDI)

91.23

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.34

12. REPORTING YEAR (SAIFI)

1.26

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

None taken or to be taken. One outage was 87% of outage time

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

Beckton (2)

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

Glasgow, KY - Hwy 685 - Beckton

5. TOTAL CIRCUIT MILES (MILES)

9.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

101

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	93.11%
Planned	5.95%
Off R/W	0.50%
Public	0.44%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

22.03

10. REPORTING YEAR (SAIDI)

242.18

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.31

12. REPORTING YEAR (SAIFI)

2.15

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

None taken or to be taken. Two outages were 92% of outage time.

CIRCUIT #21

1. SUBSTATION NAME AND NUMBER

Jonesville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Hart County - Hwy 357 - Munfordville, KY

3. CIRCUIT NAME AND NUMBER

Hammondsville (1)

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

Munfordville, KY - Hwy 357 - Hammondsville

5. TOTAL CIRCUIT MILES (MILES)

30.8

6. CUSTOMER COUNT FOR THIS CIRCUIT

338

7. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

Off R/W	68.14%
On R/W	13.83%
Animals	10.76%
Weather	3.64%
Public	2.81%
Planned	0.65%
Equipment Failure	0.17%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

244.93

10. REPORTING YEAR (SAIDI)

280.96

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.55

12. REPORTING YEAR (SAIFI)

1.80

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

None taken or to be taken. One Off R/W outage was 68% 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)

117.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

652

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	73.25%
Equipment Failure	20.38%
Planned	4.62%
Weather	1.14%
Animals	0.19%
Unknown	0.14%
Public	0.14%
On R/W	0.1%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

152.07

10. REPORTING YEAR (SAIDI)

116.02

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

n aa

12. REPORTING YEAR (SAIFI)

1.29

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

None taken or to be taken. One Off R/W outage was 73% of outage time.

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)

111.0

6. CUSTOMER COUNT FOR THIS CIRCUIT

601

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	35.58%
Unknown	22.40%
Equipment Failure	22.16%
On R/W	11.55%
Off R/W	5.78%
Planned	2.15%
Animals	0.20%
Contractor cut tree	0.18%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

49.30

10. REPORTING YEAR (SAIDI)

103.53

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.33

12. REPORTING YEAR (SAIFI)

1.10

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

None taken or to be taken. New substation brought online in 2017 still establishing 5yr average.

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)

46.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

401

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	35.39%
Equipment Failure	20.67%
Unknown	16.01%
Planned	11.51%
Public	6.98%
Animals	6.13%
Contractor cut tree	2.98%
On R/W	0.33%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

17.63

10. REPORTING YEAR (SAIDI)

42.80

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.17

12. REPORTING YEAR (SAIFI)

0.83

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

None taken or to be taken. New substation brought online in 2017 still establishing 5yr average.

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)

2.7

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

Contractor cut tree

100.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

29.62

10. REPORTING YEAR (SAIDI)

14.81

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.24

12. REPORTING YEAR (SAIFI)

0.66

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

None taken or to be taken. New substation brought online in 2017 still establishing 5yr average.

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 2020

Farmers RECC will be committed to its members by providing safe reliable electricity In 2020 we will work on the circuits listed below. We have contracted with A&G Tree Service and Greenwood Tree Service to clear the following circuits.

- Parkway South Fork has 24 miles of line
- Beckton Glasgow has 18 miles of line
- Beckton Red Cross / Railton has 74 miles of line
- Fox Hollow Roseville has 38 miles of line
- Fox Hollow 44 Market has 38 miles of line
- Fox Hollow Green Valley has 25 miles of line
- Fox Hollow Lecta has 90 miles of line Total Miles = 307 miles of line

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

We have contracted with Sage for Herbicide spraying on 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

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

SECTION 8: UTILITY COMMENTS