Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME FLEMING MASON ENERGY
REPORT PREPARED BY BRANDON HUNT
E-MAIL ADDRESS OF PREPARER
PHONE NUMBER OF PREPARER

606-845-2661

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT 2022

SECTION 3: MAJOR EVENT DAYS (MED)

T_{MED} 13.22

FIRST DATE USED TO DETERMINE T_{MED} 1/1/2017

LAST DATE USED TO DETERMINE T_{MED} 12/31/2021

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 25,734 TOTAL CIRCUITS 45

Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	163.36	SAIDI	180.9
SAIFI	1.2	SAIFI	1.44

Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	362.3	SAIDI	348.2
SAIFI	1.57	SAIFI	1.75

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}

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

Murphysville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Mason, Murphysville Rd

3. CIRCUIT NAME AND NUMBER

Barrett Pike, OCR 234

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

Barrett Pike Rd

5. TOTAL CIRCUIT LENGTH (MILES)

24.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

169

7.. DATE OF LAST CIRCUIT TRIM (VM)

2023

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

Equipment Failure	6.3	Tree w/ wind	24.5	Animal	8.1
Installation Fault	0	Tree w/ Ice	6.4	Cust Caused	1.4
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	1.2	Lightning	17.8	Public Other	0
Corrosion/Abrasion	0.6	Wind	0	Other	0
Tree Growth		Small Animal	18.4	Cause Unknown	14.4

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

6 14

10. REPORTING YEAR (SAIDI)

19.7

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.28

12. REPORTING YEAR (SAIFI)

0.13

13. CORRECTIVE ACTION PLAN

Tree with with was the largest cause. Circuit was due to be cut in 2023 and has already been cleared.

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

Hilda 2

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

KY 32 - Rowan County - Morehead

3. CIRCUIT NAME AND NUMBER

Bluestone - OCR 124

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

Bluestone Rd, Morehead

5. TOTAL CIRCUIT LENGTH (MILES)

11.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

255

7.. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Equipment Failure	4.4	Tree w/ wind	6.6	Animal	0
Installation Fault	43.1	Tree w/ Ice	0.4	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	16.6	Public Cut Tree	0
Decay/Age Equip	0.5	Lightning	3.4	Public Other	0
Corrosion/Abrasion	0	Wind	6.1	Other	0
Tree Growth	2.9	Small Animal	5.5	Cause Unknown	9.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

7.5

10. REPORTING YEAR (SAIDI)

27.67

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.18

12. REPORTING YEAR (SAIFI)

0.12

13. CORRECTIVE ACTION PLAN

A switching error was the largest contributing cause

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

Hilda 2

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

KY 32 Rowan County

3. CIRCUIT NAME AND NUMBER

Cranston, OCR 104

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

Cranston Rd, Morehead

5. TOTAL CIRCUIT LENGTH (MILES)

63.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

789

7.. DATE OF LAST CIRCUIT TRIM (VM)

2019

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

Equipment Failure	8.6	Tree Failure	0	Animal	0.1
Installation Fault	0	Tree w/ Ice	0.2	Ice	12.3
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	6.4	Public Cut Tree	0
Decay/Age Equip	0	Lightning	2.5	Public Other	0.1
Corrosion/Abrasion	0	Wind	27.9	Other	0
Tree growth	0.5	Small Animal	1.6	Cause Unknown	39.3

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

41 9

10. REPORTING YEAR (SAIDI)

44 F

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.53

12. REPORTING YEAR (SAIFI)

0.688

13. CORRECTIVE ACTION PLAN

Wind was the largest known cause.

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

Snow Hill

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

KY 165, Robertson County

3. CIRCUIT NAME AND NUMBER

Fairview, OCR 224

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

Fairview, US 68, Fleming/Mason

5. TOTAL CIRCUIT LENGTH (MILES)

45.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

449

7.. DATE OF LAST CIRCUIT TRIM (VM)

2022

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

Equipment Failure	0	Tree Failure	8.6	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	3.7
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	14.4	Public Other	0
Corrosion/Abrasion	0	Wind	2.7	Other	0
Tree W/ wind	49.3	Small Animal	3.6	Cause Unknown	17.6

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

14.96

10. REPORTING YEAR (SAIDI)

29.7

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.06

12. REPORTING YEAR (SAIFI)

0.409

13. CORRECTIVE ACTION PLAN

Trees with wind. Circuit was cleared in 2022.

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

Maysville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Mason, AA HWY

3. CIRCUIT NAME AND NUMBER

Federal Mogal OCR 214

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

Maysville, AA HWY

5. TOTAL CIRCUIT LENGTH (MILES)

6.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

67

7.. DATE OF LAST CIRCUIT TRIM (VM)

2022

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

Equipment Failure	0.1	Tree Failure	0	Animal	0.5
Installation Fault	0.3	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	14.7
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	61	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	0.5	Small Animal	17.9	Cause Unknown	4.9

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

1.64

10. REPORTING YEAR (SAIDI)

2.69

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.054

12. REPORTING YEAR (SAIFI)

0.029

13. CORRECTIVE ACTION PLAN

Lightning. Will investigate lightning protection

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

Hillsboro

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Fleming County, KY 111, Hillsboro

3. CIRCUIT NAME AND NUMBER

Grange City 204

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

Grange City, KY 111

5. TOTAL CIRCUIT LENGTH (MILES)

85.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

504

7.. DATE OF LAST CIRCUIT TRIM (VM)

2019

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

Equipment Failure	0.9	Tree W/ Wind	4.4	Animal	0
Installation Fault	0	Tree w/ Ice	6.76	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	22.9
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	55.6	Lightning	4.5	Public Other	0.2
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	1.5	Small Animal	8.0	Cause Unknown	9.1

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

20.5

10. REPORTING YEAR (SAIDI)

172.07

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.63

12. REPORTING YEAR (SAIFI)

0.75

13. CORRECTIVE ACTION PLAN

Decay/aged equipment was largest cause. Will investigate.

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

Charters

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Charters, Lewis County

3. CIRCUIT NAME AND NUMBER

Herron Hill, OCR 214

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

Herron Hill, AA Hwy, Herron Hill Rd

5. TOTAL CIRCUIT LENGTH (MILES)

117

6. CUSTOMER COUNT FOR THIS CIRCUIT

928

7.. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

5.3	Tree W/ Wind	0	Animal	0
0	Tree w/ Ice	0	Cust Caused	0
0	In-house Tree	0	Motor Vehicle	0
0	Tree out of ROW	0	Public Cut Tree	0
0	Lightning	0	Public Other	0
0	Wind	0	Other	0
0	Small Animal	78.1	Cause Unknown	7.5
	0 0 0 0	0 Tree w/ Ice 0 In-house Tree 0 Tree out of ROW 0 Lightning 0 Wind	0 Tree w/ Ice 0 0 In-house Tree 0 0 Tree out of ROW 0 0 Lightning 0 0 Wind 0	0 Tree w/ Ice 0 Cust Caused 0 In-house Tree 0 Motor Vehicle 0 Tree out of ROW 0 Public Cut Tree 0 Lightning 0 Public Other 0 Wind 0 Other

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

17 3

10. REPORTING YEAR (SAIDI)

27.17

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2.39

12. REPORTING YEAR (SAIFI)

0.23

13. CORRECTIVE ACTION PLAN

Protection for small animal and birds.

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

Big Woods

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Rowan County, KY 32

3. CIRCUIT NAME AND NUMBER

Hickory Point OCR 124

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

KY 32, Morehead

5. TOTAL CIRCUIT LENGTH (MILES)

41.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

916

7.. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Equipment Failure	12.9	Tree w/ wind	10.3	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	Tree w/ Wind	5.3	Motor Vehicle	0.1
Overload	0	Tree out of ROW	15.4	Public Cut Tree	0
Decay/Age Equip	0.7	Lightning	7.2	Public Other	0.3
Corrosion/Abrasion	0	Wind	14	Other	0.9
Tree Growth	15.3	Small Animal	6.1	Cause Unknown	11.3

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

32.23

10. REPORTING YEAR (SAIDI)

95.99

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1 13

12. REPORTING YEAR (SAIFI)

1.09

13. CORRECTIVE ACTION PLAN

outage were evenly distributed from caused. Will monitor.

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

Charters

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Lewis County, AA HWY, Vanceburg

3. CIRCUIT NAME AND NUMBER

Holly OCR 234

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

Lewis County, KY 59, Camp Dix

5. TOTAL CIRCUIT LENGTH (MILES)

148.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

832

7.. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Equipment Failure	0	Tree Failure	0	Weather	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	Tree OOR	0.4	Motor Vehicle	0
Overload	0	Tree w/ wind	5	Public Cut Tree	0
Decay/Age Equip	0	Lightning	3.6	Public Other	0
Corrosion/Abrasion	0	Wind	4.2	Other	0
dead tree	6.2	Small Animal	28.9	Cause Unknown	51.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

123.2

10. REPORTING YEAR (SAIDI)

164.2

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

3.62

12. REPORTING YEAR (SAIFI)

0.57

13. CORRECTIVE ACTION PLAN

Small animal and unknown (which also could be small animal) is the largest contributing cause. Will invistigate animal protection.

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

Flemingsburg

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Flemingsburg, Fleming

3. CIRCUIT NAME AND NUMBER

Hospital, OCR 234

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

Flemingsburg

5. TOTAL CIRCUIT LENGTH (MILES)

5

6. CUSTOMER COUNT FOR THIS CIRCUIT

166

7.. DATE OF LAST CIRCUIT TRIM (VM)

2020

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

Equipment Failure	20	Tree Failure	0	Animal	0
Installation Fault	0	Tree growth	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	61.7	Lightning	1.3	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ Wind	0	Small Animal	0	Cause Unknown	16.4

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

1.5

10. REPORTING YEAR (SAIDI)

24.53

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.367

12. REPORTING YEAR (SAIFI)

0.232

13. CORRECTIVE ACTION PLAN

Decay/aged equipment. Will investigate.

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

Maysville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

AA Hwy, Maysville

3. CIRCUIT NAME AND NUMBER

Industrial Park, OCR 224

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

AA Hwy, Maysville

5. TOTAL CIRCUIT LENGTH (MILES)

1.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

20

7.. DATE OF LAST CIRCUIT TRIM (VM)

No ROW

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

Equipment Failure	100	Tree Growth	0	Animal	0
Installation Fault	0	Tree Failure	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	0	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ wind	0	Small Animal	0	Cause Unknown	0

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.017

10. REPORTING YEAR (SAIDI)

4 61

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.0003

12. REPORTING YEAR (SAIFI)

0.0279

13. CORRECTIVE ACTION PLAN

Small amount of outages on circuit. Low 5 year average.

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

Peasticks

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Peasticks Rd, Bath County

3. CIRCUIT NAME AND NUMBER

Moores Ferry, OCR 224

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

Peasticks, Bath County

5. TOTAL CIRCUIT LENGTH (MILES)

47.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

572

7.. DATE OF LAST CIRCUIT TRIM (VM)

2020

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

Equipment Failure	0	Tree Failure	0	Animal	0.1
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	4.4	Public Cut Tree	86.7
Decay/Age Equip	0	Lightning	0.4	Public Other	0
Tree Growth	0	Wind	0	Other	0
Tree w/ wind	6.2	Small Animal	0.9	Cause Unknown	1.1

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

73.7

10. REPORTING YEAR (SAIDI)

100.37

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2 36

12. REPORTING YEAR (SAIFI)

0.427

13. CORRECTIVE ACTION PLAN

Public cut tree on line.

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

Oak Ridge

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Oak Ridge Rd, Lewis County

3. CIRCUIT NAME AND NUMBER

Mudlick, OCR 244

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

Mudlick Rd, Lewis/Fleming County

5. TOTAL CIRCUIT LENGTH (MILES)

147.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

1295

7.. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Equipment Failure	50.2	Tree Failure	5.2	Animal	0
Installation Fault	0	Tree w/ wind	11.7	Cust Caused	0.1
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	4.7	Public Cut Tree	0
Decay/Age Equip	7.3	Lightning	3.7	Public Other	0
Corrosion/Abrasion	0	Wind	6.8	Other	2.3
Ice	4	Small Animal	0.5	Cause Unknown	3.4

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

68.13

10. REPORTING YEAR (SAIDI)

225.57

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

2.05

12. REPORTING YEAR (SAIFI)

1.904

13. CORRECTIVE ACTION PLAN

Equipment failure was largest factor. Will monitor.

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

Peasticks

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Peasticks, Bath County

3. CIRCUIT NAME AND NUMBER

Owingsville/Sharpsburg, OCR 234

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

Owningsville-Sharpsburg, KY 11

5. TOTAL CIRCUIT LENGTH (MILES)

149.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

948

7.. DATE OF LAST CIRCUIT TRIM (VM)

2020

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

Equipment Failure	43	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ wind	33.6	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0.2
Overload	0	Tree out of ROW	0.1	Public Cut Tree	0
Decay/Age Equip	8.0	Lightning	4.1	Public Other	0.2
Corrosion/Abrasion	0	Wind	6.9	Other	0
Tree Growth	0	Small Animal	3.2	Cause Unknown	7.8

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

33.8

10. REPORTING YEAR (SAIDI)

45.2

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.83

12. REPORTING YEAR (SAIFI)

0.168

13. CORRECTIVE ACTION PLAN

Equipment failure was largest cause. Will monitor.

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

RECTORVILLE

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

OWL HOLLOW RD, MASON COUNTY

3. CIRCUIT NAME AND NUMBER

Plumville OCR 234

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

Plumville, KY 10, Plumville

5. TOTAL CIRCUIT LENGTH (MILES)

76

6. CUSTOMER COUNT FOR THIS CIRCUIT

911

7.. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Equipment Failure	1.2	Tree Failure	4.8	Animal	0
Installation Fault	0.69	Tree w/ wind	13.7	Cust Caused	0.5
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0.4
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	1.4	Public Other	61.4
Corrosion/Abrasion	0	Ice	1	Other	0.2
Tree Growth	0.2	Small Animal	3.9	Cause Unknown	11.2

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

43.02

10. REPORTING YEAR (SAIDI)

57.41

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.43

12. REPORTING YEAR (SAIFI)

0.187

13. CORRECTIVE ACTION PLAN

Public was the largest outage cause.

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

Hillsboro

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Fleming County, KY 111, Hillsboro

3. CIRCUIT NAME AND NUMBER

Poplar Plain OCR 224

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

KY 111, Poplar Plains

5. TOTAL CIRCUIT LENGTH (MILES)

71.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

430

7.. DATE OF LAST CIRCUIT TRIM (VM)

2019

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

Equipment Failure	3	Tree Failure	11.2	Animal	0.1
Installation Fault	0	Tree w/ wind	0	Cust Caused	0.1
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	0.4	Public Other	0.2
Ice	3.4	Wind	77.9	Other	0.1
Tree w/ wind	0	Small Animal	3.2	Cause Unknown	0.5

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

22.18

10. REPORTING YEAR (SAIDI)

25.36

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.47

12. REPORTING YEAR (SAIFI)

0.025

13. CORRECTIVE ACTION PLAN

Wind was the largest cause.

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

Oak Ridge

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Oak Ridge, Lewis

3. CIRCUIT NAME AND NUMBER

Petersville, OCR 234

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

Petersville, Lewis County

5. TOTAL CIRCUIT LENGTH (MILES)

32.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

169

7.. DATE OF LAST CIRCUIT TRIM (VM)

2018

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

Equipment Failure	16.4	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ wind	48.8	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	30.9	Public Cut Tree	0
Decay/Age Equip	0	Lightning	0	Public Other	0
Corrosion/Abrasion	0	Wind	2.1	Other	0
Tree Growth	0	Small Animal	0	Cause Unknown	1.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

17.84

10. REPORTING YEAR (SAIDI)

23.44

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.59

12. REPORTING YEAR (SAIFI)

0.135

13. CORRECTIVE ACTION PLAN

Trees with wind storms.

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

Charters

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Charters, Lewis County

3. CIRCUIT NAME AND NUMBER

Salt Lick, OCR 204

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

Salt Lick Rd, Lewis County

5. TOTAL CIRCUIT LENGTH (MILES)

11.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

89

7.. DATE OF LAST CIRCUIT TRIM (VM)

2017

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

Equipment Failure	8.5	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	76.1	Public Cut Tree	0
Decay/Age Equip	0	Lightning	0	Public Other	0
Tree Growth	0	Wind	0	Other	10.1
Tree w/ wind	0	Small Animal	5.2	Cause Unknown	0

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.3102

10. REPORTING YEAR (SAIDI)

1.168

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.023

12. REPORTING YEAR (SAIFI)

0.0053

13. CORRECTIVE ACTION PLAN

Tree out of right of way is the largest cause. Will monitor danger trees.

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

Murphysville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Murphysville Rd, Mason County

3. CIRCUIT NAME AND NUMBER

Stonewall, OCR 224

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

Stonewall, Bracken, Mason, Robertson County

5. TOTAL CIRCUIT LENGTH (MILES)

212.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

1463

7.. DATE OF LAST CIRCUIT TRIM (VM)

2021

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

Equipment Failure	2.3	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0.2
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0.1	Public Cut Tree	0
Decay/Age Equip	92.9	Lightning	1	Public Other	0
Corrosion/Abrasion	0	Wind	0.6	Other	0
Tree w/ wind	0.6	Small Animal	0.3	Cause Unknown	0.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

136.2

10. REPORTING YEAR (SAIDI)

352.48

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

6.02

12. REPORTING YEAR (SAIFI)

1.856

13. CORRECTIVE ACTION PLAN

Decay/aged equipment the largest cause. Couple broken poles.

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

MURPHYSVILLE

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

MASON, MURPHYSVILLE

3. CIRCUIT NAME AND NUMBER

Strodes Run, OCR 244

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

Strodes Run Rd, Mason County

5. TOTAL CIRCUIT LENGTH (MILES)

29.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

104

7.. DATE OF LAST CIRCUIT TRIM (VM)

2022

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

Equipment Failure	0	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	1.8	Public Other	0
Corrosion/Abrasion	0	Wind	80.7	Other	0
Tree Growth	0	Small Animal	6.4	Cause Unknown	11.1

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

4.4

10. REPORTING YEAR (SAIDI)

4.72

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.115

12. REPORTING YEAR (SAIFI)

0.024

13. CORRECTIVE ACTION PLAN

Wind was the largest contributing cause.

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

Flemingsburg

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Flemingsburg, Fleming County

3. CIRCUIT NAME AND NUMBER

Tilton OCR 204

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

Tilton, KY 11, Fleming County

5. TOTAL CIRCUIT LENGTH (MILES)

80.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

644

7.. DATE OF LAST CIRCUIT TRIM (VM)

2021

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

Equipment Failure	82.8	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	1.2
Decay/Age Equip	0	Lightning	1.8	Public Other	0
Ice	10.1	Wind	0.3	Other	0
Tree Growth	0	Small Animal	1.8	Cause Unknown	2

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

23.65

10. REPORTING YEAR (SAIDI)

45.65

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.44

12. REPORTING YEAR (SAIFI)

0.632

13. CORRECTIVE ACTION PLAN

Equipment failure. Will monitor.

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

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

Rectorville

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Rectorville, Lewis County

3. CIRCUIT NAME AND NUMBER

Tollesboro, OCR 224

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

Tollesboro, Lewis County

5. TOTAL CIRCUIT LENGTH (MILES)

68.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

985

7.. DATE OF LAST CIRCUIT TRIM (VM)

2016

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

Equipment Failure	0.9	Tree Failure	0	Animal	0.2
Installation Fault	0	Tree w/ Ice	0	Cust Caused	2.3
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	14.3	Lightning	3.3	Public Other	0
Corrosion/Abrasion	0	Wind	3	Other	0.5
Tree Wind	0.1	Small Animal	6.6	Cause Unknown	66.2

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

12.13

10. REPORTING YEAR (SAIDI)

14.87

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.79

12. REPORTING YEAR (SAIFI)

0.133

13. CORRECTIVE ACTION PLAN

Unknown was the largest cause.

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

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

Flemingsburg

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Flemingsburg, Fleming County

3. CIRCUIT NAME AND NUMBER

Toyo Seat, OCR 224

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

Toyo Seat, Flemingsburg

5. TOTAL CIRCUIT LENGTH (MILES)

10.4

6. CUSTOMER COUNT FOR THIS CIRCUIT

88

7.. DATE OF LAST CIRCUIT TRIM (VM)

2020

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

Equipment Failure	91.2	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	5.1	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	0	Small Animal	2.8	Cause Unknown	1

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.51

10. REPORTING YEAR (SAIDI)

2.11

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.29

12. REPORTING YEAR (SAIFI)

0.0411

13. CORRECTIVE ACTION PLAN

Limited outages on this circuit.

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

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

Flemingsburg

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

Flemingsburg, Fleming County

3. CIRCUIT NAME AND NUMBER

Underbuild, OCR 244

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

Wallingford, Fleming County

5. TOTAL CIRCUIT LENGTH (MILES)

77

6. CUSTOMER COUNT FOR THIS CIRCUIT

893

7.. DATE OF LAST CIRCUIT TRIM (VM)

2022

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

Equipment Failure	61.6	Tree Failure	0	Animal	0.1
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	2.8
Overload	0	Tree out of ROW	1.6	Public Cut Tree	0
Decay/Age Equip	0.1	Lightning	0.7	Public Other	0
Corrosion/Abrasion	0	Wind	0.2	Other	0
Tree w/ wind	0.5	Small Animal	29.8	Cause Unknown	2.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

16.7

10. REPORTING YEAR (SAIDI)

72.04

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.88

12. REPORTING YEAR (SAIFI)

1.26

13. CORRECTIVE ACTION PLAN

Equipment failure is the largest cause. Will investigate.

FOR SAIDI AND/OR SAIFI

Trimming Cycle - 8 years Spaying Cycle - 2 years