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PUBLIC SERVICE COMMISSION

April 8, 2021

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

Dear Executive Director:

Enclosed is Fleming Mason Energy's Reliability Report for the calendar year of 2019 requested by the Public Service Commission's Order dated May 30, 2013 for Case No. 2011-00450.

If you have any questions or comments, please contact the office at, 1-800-464-3144 or by email at bhunt@fme.coop.

Sincerely,

Brandon Hunt, P.E.

Engineering and Operations Manager

# Electric Distribution Utility Annual Reliability Report SECTION 1: CONTACT INFORMATION UTILITY NAME FLEMING MASON ENERGY **BRANDON HUNT** REPORT PREPARED BY E-MAIL ADDRESS OF PREPARER bhunt@fme.coop PHONE NUMBER OF PREPARER 606-845-2661 **SECTION 2: REPORTING YEAR** CALENDAR YEAR OF REPORT 2020 **SECTION 3: MAJOR EVENT DAYS (MED)** 12.21 FIRST DATE USED TO DETERMINE TMED 1/1/2015 LAST DATE USED TO DETERMINE TMED 12/31/2019 NUMBER OF MED IN REPORT YEAR NOTE: Per IEEE 1366 T<sub>MED</sub> 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** 25,163 TOTAL CIRCUITS **Excluding MED 5 YEAR AVERAGE** REPORTING YEAR SAIDI 153.74 SAIDI 123.17 SAIFI 1.18 SAIFI

#### Notes:

SAIDI

SAIFI

- 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

**5 YEAR AVERAGE** 

297.41

3) Reports cover the calendar year ending in the December before the reports are due.

Including MED

SAIDI

SAIFI

REPORTING YEAR

320.68

IEEE 1366 (latest version) is used to define SAIDI, SAIFI, and T<sub>MED</sub>

## **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

SHARKEY

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

KY 801, SHARKEY

3. CIRCUIT NAME AND NUMBER

801/FARMERS OCR 224

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

**KY 801, FARMERS** 

5. TOTAL CIRCUIT LENGTH (MILES)

46.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

804

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	0.27	Tree Failure	0.12	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	Ö
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	13.68	<b>Public Cut Tree</b>	0
Decay/Age Equip	14.8	Lightning	2.6	Public Other	0
Corrosion/Abrasion	0	Wind	39.37	Other	0
Tree Growth	9.94	Smali Animal	0.71	Cause Unknown	14.19

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

40.01

10. REPORTING YEAR (SAIDI)

22.59

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.302

12. REPORTING YEAR (SAIFI)

0.7725

13. CORRECTIVE ACTION PLAN

Largest cause was wind. Element out of our control. Will investigate aged equipment.

#### **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

**PLUMMERS LANDING** 

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**KY 32 - PLUMMERS LANDING** 

3. CIRCUIT NAME AND NUMBER

**BLUEBANK OCR114** 

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

**KY 32 - PLUMMERS LANDING TO FLEMINGSBURG** 

5. TOTAL CIRCUIT LENGTH (MILES)

48

6. CUSTOMER COUNT FOR THIS CIRCUIT

508

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

<b>Equipment Failure</b>	0	Tree Failure	5.55	Animal	0
Installation Fault	0	Tree w/ ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	39.02
Overload	0	Tree out of ROW	23.82	<b>Public Cut Tree</b>	0
Decay/Age Equip	14.44	Lightning	1.69	Public Other	0
Corrosion/Abrasion	0	Wind	12.45	Other	0
Tree Growth	0	Small Animal	2.81	Cause Unknown	0.23

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

50.06

10. REPORTING YEAR (SAIDI)

31.41

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.317

12. REPORTING YEAR (SAIFI)

0.779

13. CORRECTIVE ACTION PLAN

Mortor vehicle was highest 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)

**LEWIS, OAK RIDGE RD** 

3. CIRCUIT NAME AND NUMBER

**BURTONVILLE OCR 224** 

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

**BURTONVILLE, SALT LICK RD** 

5. TOTAL CIRCUIT LENGTH (MILES)

56.9

6. CUSTOMER COUNT FOR THIS CIRCUIT

336

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

<b>Equipment Failure</b>	0.34	Tree Failure	0.1	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	7.06	Public Other	0
Corrosion/Abrasion	0	Wind	0.22	Other	57.62
Tree w/ wind	33.65	Small Animal	0.32	Cause Unknown	0.7

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

35.25

10. REPORTING YEAR (SAIDI)

49.19

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1 3

12. REPORTING YEAR (SAIFI)

0.251

13. CORRECTIVE ACTION PLAN

Trees with wind. Ensure cycle busting trees are getting attention as well as dead/leaning trees along ROW

## **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. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**KY 32, MOREHEAD** 

3. CIRCUIT NAME AND NUMBER

**CRANSTON, OC104** 

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	0	Tree Failure	18.23	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	48.48
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0.6
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	1.11	Lightning	0.22	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0.72
Tree W/ wind	22.03	Small Animal	0.15	Cause Unknown	1.93

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

29.06

10. REPORTING YEAR (SAIDI)

69.62

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.38

12. REPORTING YEAR (SAIFI)

0.661

13. CORRECTIVE ACTION PLAN

CUSTOMER CAUSED OUTAGE WAS HIGHEST CAUSE. TREE FAULURE WITH WIND.

## **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)

**ROBERTSON, KY 165, PIQUA** 

3. CIRCUIT NAME AND NUMBER

**DOYLE PIKE OCR 244** 

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

DOYLE PIKE, ROBERTSON COUNTY

5. TOTAL CIRCUIT LENGTH (MILES)

49.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

270

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	Tree Failure	17.62	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	5.52	Public Other	0
Corrosion/Abrasion	0	Wind	0.16	Other	0.36
Tree Growth	0	Small Animal	0.57	Cause Unknown	67.74

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

12.98

10. REPORTING YEAR (SAIDI)

19.62

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.6615

12. REPORTING YEAR (SAIFI)

0.253

13. CORRECTIVE ACTION PLAN

**UNKNOWN CAUSE. MONITOR CLOSER** 

## **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, PIQUA** 

3. CIRCUIT NAME AND NUMBER

**FAIRVIEW OCR 224** 

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

**KY 165, TOWARDS FLEMINGSBURG** 

5. TOTAL CIRCUIT LENGTH (MILES)

45.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

449

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	0.23	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	7.95
Overload	0	Tree out of ROW	0	<b>Public Cut Tree</b>	0
Decay/Age Equip	0	Lightning	27.94	Public Other	0
Corrosion/Abrasion	0	Wind	50.68	Other	0
Tree Growth	1.24	Small Animal	9	Cause Unknown	2.97

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

9.06

10. REPORTING YEAR (SAIDI)

29.91

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.0977

12. REPORTING YEAR (SAIFI)

0.156

13. CORRECTIVE ACTION PLAN

#### WIND STORMS WERE 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

**PEASTICKS** 

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**BATH COUNTY, PEASTICKS RD** 

3. CIRCUIT NAME AND NUMBER

**FORDGE MILL OCR214** 

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

FORDGE MILL, BATH COUNTY

5. TOTAL CIRCUIT LENGTH (MILES)

40.8

6. CUSTOMER COUNT FOR THIS CIRCUIT

406

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	0.34	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	5.22
Conductor Sag	0	Tree w/ Wind	0	Motor Vehicle	9.39
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	53.62	Lightning	19.12	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	10.86	Small Animal	1.45	Cause Unknown	0

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

14.96

10. REPORTING YEAR (SAIDI)

19.2

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.431

12. REPORTING YEAR (SAIFI)

0.214

13. CORRECTIVE ACTION PLAN

LARGEST OUTAGE ON LINE WAS A LIGHTNING ARRESTER FAILURE.

#### 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)

**KY 111, FLEMING COUNTY** 

3. CIRCUIT NAME AND NUMBER

**GRANGE CITY** 

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

KY 111, FLEMING COUNTY AND INTO BATH COUNTY

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

<b>Equipment Failure</b>	15.36	Tree Failure	3.78	Animal	0
Installation Fault	0.85	Tree w/ Ice	0	Cust Caused	0.05
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	4.57	Public Cut Tree	0
Decay/Age Equip	0	Lightning	5.86	Public Other	0
Corrosion/Abrasion	0	Wind	29.98	Other	0
Tree Growth	0.7	Small Animal	0.87	Cause Unknown	37.98

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

18.87

10. REPORTING YEAR (SAIDI)

41.39

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.565

12. REPORTING YEAR (SAIFI)

0.4125

13. CORRECTIVE ACTION PLAN

#### UNKNOWN OUTAGE WAS 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

**BIG WOODS** 

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**KY 32, ROWAN COUNTY** 

3. CIRCUIT NAME AND NUMBER

**HICKORY POINTE** 

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

**KY 32, ROWAN COUNTY** 

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

<b>Equipment Failure</b>	0.22	Tree Failure	9.56	Animal	0.1
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0.67
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	0	Public Cut Tree	64.39
Decay/Age Equip	0	Lightning	0.21	Public Other	0.56
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ Wind	15.78	Small Animal	0.89	Cause Unknown	7.63

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

11.61

10. REPORTING YEAR (SAIDI)

48.94

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.9975

12. REPORTING YEAR (SAIFI)

0.342

13. CORRECTIVE ACTION PLAN

#### MEMBER CUT TREE ON ONTO 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

**BIG WOODS** 

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**KY 32, ROWAN COUNTY** 

3. CIRCUIT NAME AND NUMBER

**KY 158** 

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

**KY 158, ROWAN COUNTY** 

5. TOTAL CIRCUIT LENGTH (MILES)

21.5

6. CUSTOMER COUNT FOR THIS CIRCUIT

340

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

<b>Equipment Failure</b>	0	Tree Failure	0.4	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	95.89
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	0.48	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ wind	0	Small Animal	0	Cause Unknown	2.88

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

0.7

10. REPORTING YEAR (SAIDI)

14.94

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.0561

12. REPORTING YEAR (SAIFI)

0.0468

13. CORRECTIVE ACTION PLAN

MOTOR VEHICLE ACCIDENT.

## **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 / CLYDE BARBER PKWY, MASON COUNTY

3. CIRCUIT NAME AND NUMBER

## **MORANSBURG**

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

## **DOVER, MASON COUNTY**

5. TOTAL CIRCUIT LENGTH (MILES)

90.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

626

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

<b>Equipment Failure</b>	2.09	Tree Failure	1.72	Animal	0.25
Installation Fault	0	Tree w/ Ice	0	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	0	<b>Public Cut Tree</b>	0
Decay/Age Equip	0.16	Lightning <sub>.</sub>	20.4	Public Other	0.1
Tree Growth	27.22	Wind	21.92	Other	0.04
Tree w/ wind	5.22	Small Animal	13.16	Cause Unknown	2.3

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

194.43

10. REPORTING YEAR (SAIDI)

219.31

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

4.91

12. REPORTING YEAR (SAIFI)

0.73

13. CORRECTIVE ACTION PLAN

TREE GROWTH IS LARGEST CAUSE. CKT IS DUE TO BE CUT IN 2021

## 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

**PLUMMERS LANDING** 

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

FLEMING, KY 32, PLUMERS LANDING

3. CIRCUIT NAME AND NUMBER

**MUSES MILL OCR 124** 

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

**MUSES MILL, KY 1013** 

5. TOTAL CIRCUIT LENGTH (MILES)

70.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

484

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

<b>Equipment Failure</b>	0.05	Tree Failure	12.84	Animal	0.05
Installation Fault	0	Tree w/ wind	80.27	<b>Cust Caused</b>	0.32
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	3.8	<b>Public Cut Tree</b>	0
Decay/Age Equip	1.07	Lightning	0.47	<b>Public Other</b>	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	0.13	Small Animal	0.22	Cause Unknown	0.78

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

70.9

10. REPORTING YEAR (SAIDI)

74.23

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.82

12. REPORTING YEAR (SAIFI)

0.516

13. CORRECTIVE ACTION PLAN

TREES WITH WIND.

## **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

**OWINGSVILLE-SHAPRSBURG** 

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

**KY 11, BATH COUNTY** 

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	0.31	Tree Failure	6.67	Animal	0.27
Installation Fault	1.11	Tree w/ wind	44.57	Cust Caused	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0.2
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0.12	Lightning	23.94	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	5.07	Small Animal	2.25	Cause Unknown	14.99

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

70.95

10. REPORTING YEAR (SAIDI)

74.23

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.85

12. REPORTING YEAR (SAIFI)

1.73

13. CORRECTIVE ACTION PLAN

LARGE CIRCUIT. WEATHER RELATED, TREES WITH WIND AND LIGHTNING, WAS THE LARGEST CAUSES

#### **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

**OWL HOLLOW** 

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

**OWL HOLLOW RD, MASON COUNTY** 

5. TOTAL CIRCUIT LENGTH (MILES)

53.6

6. CUSTOMER COUNT FOR THIS CIRCUIT

305

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

<b>Equipment Failure</b>	0	Tree Failure	1.28	Animal	0
Installation Fault	0	Tree w/ wind	19.82	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	76.17	<b>Public Cut Tree</b>	0
Decay/Age Equip	0	Lightning	0	Public Other	0
Corrosion/Abrasion	0	Wind	0.08	Other	0
Tree Growth	0	Small Animal	0.23	Cause Unknown	2.43

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

10.86

10. REPORTING YEAR (SAIDI)

36.11

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.39

12. REPORTING YEAR (SAIFI)

0.167

13. CORRECTIVE ACTION PLAN

One large tree out of ROW outage. ROW has stayed on schedule.

## 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, PIQUA, ROBERTSON COUNTY** 

3. CIRCUIT NAME AND NUMBER

**PIQUA** 

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

**KY 165, PIQUA, ROBERTSON COUNTY** 

5. TOTAL CIRCUIT LENGTH (MILES)

32.3

6. CUSTOMER COUNT FOR THIS CIRCUIT

176

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	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ wind	57.07	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0
Overload	0	Tree out of ROW	0	<b>Public Cut Tree</b>	0
Decay/Age Equip	0	Lightning	20.26	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ wind	0	Small Animal	7.06	Cause Unknown	15.62

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

2.63

10. REPORTING YEAR (SAIDI)

33.01

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.29

12. REPORTING YEAR (SAIFI)

0.133

13. CORRECTIVE ACTION PLAN

Trees with wind is 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

MURPHYSVILLE

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

MURPHYSVILLE, MASON COUNTY

3. CIRCUIT NAME AND NUMBER

STONEWALL

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

**BROOKSVILLE, MASON/BRACKEN COUNTY** 

5. TOTAL CIRCUIT LENGTH (MILES)

212.2

6. CUSTOMER COUNT FOR THIS CIRCUIT

1463

7.. DATE OF LAST CIRCUIT TRIM (VM)

2015

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

<b>Equipment Failure</b>	26.27	Tree Failure	0.13	Animal	0
Installation Fault	0	Tree w/ wind	0.36	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	<b>Motor Vehicle</b>	0.42
Overload	0	Tree out of ROW	0.18	<b>Public Cut Tree</b>	0
Decay/Age Equip	33.14	Lightning	1.23	<b>Public Other</b>	0
Corrosion/Abrasion	0	Wind	7.13	Other	0.19
Tree Growth	0	Small Animal	4.83	Cause Unknown	25.87

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

100.46

10. REPORTING YEAR (SAIDI)

174.57

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

5.67

12. REPORTING YEAR (SAIFI)

1.46

13. CORRECTIVE ACTION PLAN

INSULATOR FAILURE WAS A LARGE OUTAGE THAT ELEVATED THE NUMBERS.

#### **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)

FLEMING, ENERGY RD, FLEMINGSBURG

3. CIRCUIT NAME AND NUMBER

**UNDERBUILD OCR 244** 

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

WALLINGFORD, KY 59

5. TOTAL CIRCUIT LENGTH (MILES)

77

6. CUSTOMER COUNT FOR THIS CIRCUIT

893

7.. DATE OF LAST CIRCUIT TRIM (VM)

2014

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

<b>Equipment Failure</b>	0.32	Tree Failure	0	Animal	0.17
Installation Fault	0	Tree w/ Ice	0	<b>Cust Caused</b>	0.04
Conductor Sag	0	In-house Tree	0	Motor Vehicle	5.46
Overload	0	Tree out of ROW	2.24	<b>Public Cut Tree</b>	0
Decay/Age Equip	0.14	Lightning	49.42	Public Other	1.55
Corrosion/Abrasion	0	Wind	0	Other	11.72
Tree w/ wind	21.58	Small Animal	2.45	Cause Unknown	4.74

CIRCUIT 5 YEAR AVERAGE (SAIDI)

15.3

10. REPORTING YEAR (SAIDI)

18.3

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

0.895

12. REPORTING YEAR (SAIFI)

0.102

13. CORRECTIVE ACTION PLAN

LIGHTNING WAS THE BIGGEST CAUSE. WILL INVESTIGATE MORE 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

CHARTERS

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

**LEWIS, KY 9, CHARTERS** 

3. CIRCUIT NAME AND NUMBER

**VANCEBURG OCR 224** 

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

**VANCEBURG, KY 9** 

5. TOTAL CIRCUIT LENGTH (MILES)

170.1

6. CUSTOMER COUNT FOR THIS CIRCUIT

1372

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	3.16	Tree Failure	4.29	Animal	0
Installation Fault	0.02	Tree w/ Ice	0	Cust Caused	0.04
Conductor Sag	0	In-house Tree	0	Motor Vehicle	22.89
Overload	0	Tree out of ROW	45.13	Public Cut Tree	0
Decay/Age Equip	0.15	Lightning	5.21	Public Other	0
Corrosion/Abrasion	0	Wind	0.13	Other	0.12
Tree w/ wind	16.7	Small Animal	0.32	Cause Unknown	1.52

CIRCUIT 5 YEAR AVERAGE (SAIDI)

151.3

10. REPORTING YEAR (SAIDI)

224.4

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

5.41

12. REPORTING YEAR (SAIFI)

1.44

13. CORRECTIVE ACTION PLAN

TREE OUT OF ROW 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

MURPHYSVILLE

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)

MASON, MURPHYSVILLE

3. CIRCUIT NAME AND NUMBER

**WEAVER RD OCR 214** 

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

MAYSLICK, US 68

5. TOTAL CIRCUIT LENGTH (MILES)

83.7

6. CUSTOMER COUNT FOR THIS CIRCUIT

73

7.. DATE OF LAST CIRCUIT TRIM (VM)

2015

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

Equipment Failure	0.18	Tree Failure	0	Animal	0
Installation Fault	0.22	Tree w/ Ice	0	<b>Cust Caused</b>	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	10.47
Overload	0	Tree out of ROW	11.33	Public Cut Tree	0
Decay/Age Equip	0.3	Lightning	46.33	<b>Public Other</b>	0
Corrosion/Abrasion	0	Wind	0.42	Other	0
Tree Growth	0	Small Animal	15.91	Cause Unknown	14.82

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

17.33

10. REPORTING YEAR (SAIDI)

18.32

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

1.01

12. REPORTING YEAR (SAIFI)

0.145

13. CORRECTIVE ACTION PLAN

LIGHTNING WAS LARGEST CAUSE. WILL INVESTIGATE LIGHTNING PROTECTION.

2021 - FLEMINGSBURG (COWAN, TILTON), MURPHYSVILLE (WEAVER RD, ST	ONEWALL)
Trimming Cycle - 6 years Spaying Cycle - 3 years	
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