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MAY 26 2020

PUBLIC SERVICE  
COMMISSION

May 22, 2020

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](mailto:bhunt@fme.coop).

Sincerely,



Brandon Hunt, P.E.  
Engineering and Operations Manager

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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	<a href="mailto:bhunt@fme.coop">bhunt@fme.coop</a>
PHONE NUMBER OF PREPARER	606-845-2661

### SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2019
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### SECTION 3: MAJOR EVENT DAYS (MED)

$T_{MED}$	11.62
FIRST DATE USED TO DETERMINE $T_{MED}$	1/1/2014
LAST DATE USED TO DETERMINE $T_{MED}$	12/31/2018
NUMBER OF MED IN REPORT YEAR	4

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	24,629	TOTAL CIRCUITS	45
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#### Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	142.43	SAIDI	151.9
SAIFI	1.104	SAIFI	1.125

#### Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	269.96	SAIDI	250.5
SAIFI	1.39	SAIFI	1.419

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#### 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  $T_{MED}$

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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 OCR 114**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**KY 32 BLUEBANK**
5. TOTAL CIRCUIT LENGTH (MILES)  
**48**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**508**
- 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

Equipment Failure	1.67	Tree Failure	0.76	Animal	0
Installation Fault	0.46	Tree w/ Ice	0	Cust Caused	0.1
Conductor Sag	0	In-house Tree	0	Motor Vehicle	86.03
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	6.02	Lightning	1.83	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree Growth	0	Small Animal	1.66	Cause Unknown	1.47

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**22.59**
10. REPORTING YEAR (SAIDI)  
**51.25**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.4097**
12. REPORTING YEAR (SAIFI)  
**0.8378**
13. CORRECTIVE ACTION PLAN

A large motor vehicle outage elevated the yearly numbers.

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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  
**Bluelicks OCR 114**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**US 68 / Bluelicks / Nicholas County**
5. TOTAL CIRCUIT LENGTH (MILES)  
**104.4**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**664**
- 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>	<b>51.91</b>	<b>Tree Failure</b>	<b>3.8</b>	<b>Animal</b>	<b>0</b>
<b>Installation Fault</b>	<b>0</b>	<b>Tree w/ Ice</b>	<b>0</b>	<b>Cust Caused</b>	<b>0</b>
<b>Conductor Sag</b>	<b>0</b>	<b>In-house Tree</b>	<b>0</b>	<b>Motor Vehicle</b>	<b>0</b>
<b>Overload</b>	<b>0</b>	<b>Tree out of ROW</b>	<b>0</b>	<b>Public Cut Tree</b>	<b>0</b>
<b>Decay/Age Equip</b>	<b>40.75</b>	<b>Lightning</b>	<b>2.04</b>	<b>Public Other</b>	<b>0.16</b>
<b>Corrosion/Abrasion</b>	<b>0</b>	<b>Wind</b>	<b>0.16</b>	<b>Other</b>	<b>0</b>
<b>Tree Growth</b>	<b>0</b>	<b>Small Animal</b>	<b>0.21</b>	<b>Cause Unknown</b>	<b>0.94</b>
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**39.78**
10. REPORTING YEAR (SAIDI)  
**78.25**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.1899**
12. REPORTING YEAR (SAIFI)  
**0.5535**
13. CORRECTIVE ACTION PLAN

**Equipment failure was largest cause. Couple insulator outages.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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>	<b>80.86</b>	<b>Tree Failure</b>	<b>9.84</b>	<b>Animal</b>	<b>0</b>
<b>Installation Fault</b>	<b>0</b>	<b>Tree w/ Ice</b>	<b>0</b>	<b>Cust Caused</b>	<b>0</b>
<b>Conductor Sag</b>	<b>0</b>	<b>In-house Tree</b>	<b>0</b>	<b>Motor Vehicle</b>	<b>0</b>
<b>Overload</b>	<b>0</b>	<b>Tree out of ROW</b>	<b>0</b>	<b>Public Cut Tree</b>	<b>0</b>
<b>Decay/Age Equip</b>	<b>0.1</b>	<b>Lightning</b>	<b>3.81</b>	<b>Public Other</b>	<b>0</b>
<b>Corrosion/Abrasion</b>	<b>0</b>	<b>Wind</b>	<b>0</b>	<b>Other</b>	<b>1.62</b>
<b>Tree w/ wind</b>	<b>0.59</b>	<b>Small Animal</b>	<b>0.54</b>	<b>Cause Unknown</b>	<b>2.64</b>
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**27.35**
10. REPORTING YEAR (SAIDI)  
**55.48**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.257**
12. REPORTING YEAR (SAIFI)  
**0.252**
13. CORRECTIVE ACTION PLAN

**Equipment failure. Broken pole had the largest outage.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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)  
**MAYSLICK, DOYLE PIKE**
5. TOTAL CIRCUIT LENGTH (MILES)  
**49.5**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**279**
- 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	3.58	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	77.26	Public Cut Tree	0
Decay/Age Equip	0	Lightning	13.96	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0.76
Tree W/ wind	2.34	Small Animal	0.39	Cause Unknown	1.77

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**9.462**
10. REPORTING YEAR (SAIDI)  
**22.576**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0741**
12. REPORTING YEAR (SAIFI)  
**0.217**
13. CORRECTIVE ACTION PLAN

**TREE OUT OF ROW WAS THE MAIN CAUSE FOR THE ELEVATED NUMBERS.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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  
**FAIRVIEW OCR 224**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**FARIVIEW, KY 165**
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	Tree Failure	0	Animal	30
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0.55
Conductor Sag	0	In-house Tree	0	Motor Vehicle	46.96
Overload	0	Tree out of ROW	1.88	Public Cut Tree	0
Decay/Age Equip	0	Lightning	12.09	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0.61
Tree Growth	0	Small Animal	0	Cause Unknown	7.92

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**12.42**
10. REPORTING YEAR (SAIDI)  
**19.24**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0911**
12. REPORTING YEAR (SAIFI)  
**0.269**
13. CORRECTIVE ACTION PLAN

**Motor vehicle was largest cause.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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, PEASTICKS, PEASTICKS**
3. CIRCUIT NAME AND NUMBER  
**FORDGE MILL OCR 214**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**PEASTICKS, FORDGE MILL**
5. TOTAL CIRCUIT LENGTH (MILES)  
**40.8**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**508**
- 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

Equipment Failure	0.05	Tree Failure	13	Animal	0
Installation Fault	0	Tree w/ Ice	2.23	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	24.83	Public Cut Tree	0
Decay/Age Equip	0	Lightning	33.83	Public Other	0
Corrosion/Abrasion	0.13	Wind	0.378	Other	0.25
Tree Growth	6.71	Small Animal	6.7	Cause Unknown	9.83

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**11.796**
10. REPORTING YEAR (SAIDI)  
**21.828**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0901**
12. REPORTING YEAR (SAIFI)  
**0.179**
13. CORRECTIVE ACTION PLAN

Lightning was major cause. Will investigate lightning protection.

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



# KENTUCKY PUBLIC SERVICE COMMISSION

## 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  
**HOLLY OCR 234**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**LAUREL, HOLLY**
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	31.27	Tree Failure	1	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	Tree w/ Wind	21.06	Motor Vehicle	13.83
Overload	0	Tree out of ROW	7.46	Public Cut Tree	0.93
Decay/Age Equip	0	Lightning	1.26	Public Other	0
Corrosion/Abrasion	0	Wind	8.44	Other	0
Tree Growth	10.88	Small Animal	0.21	Cause Unknown	3.66

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**99.12**
10. REPORTING YEAR (SAIDI)  
**100.45**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.664**
12. REPORTING YEAR (SAIFI)  
**0.4704**
13. CORRECTIVE ACTION PLAN

Large insulator outage.

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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  
**HOSPITAL OCR 234**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**FLEMINGSBURG, KY 32**
5. TOTAL CIRCUIT LENGTH (MILES)  
**5**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**166**
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>	<b>0</b>	<b>Tree Failure</b>	<b>0</b>	<b>Animal</b>	<b>0</b>
<b>Installation Fault</b>	<b>0</b>	<b>Tree w/ Ice</b>	<b>0</b>	<b>Cust Caused</b>	<b>0</b>
<b>Conductor Sag</b>	<b>0</b>	<b>In-house Tree</b>	<b>0</b>	<b>Motor Vehicle</b>	<b>0</b>
<b>Overload</b>	<b>0</b>	<b>Tree out of ROW</b>	<b>0</b>	<b>Public Cut Tree</b>	<b>0</b>
<b>Decay/Age Equip</b>	<b>0</b>	<b>Lightning</b>	<b>0.81</b>	<b>Public Other</b>	<b>0</b>
<b>Corrosion/Abrasion</b>	<b>0</b>	<b>Wind</b>	<b>0</b>	<b>Other</b>	<b>1.45</b>
<b>Tree Growth</b>	<b>0</b>	<b>Small Animal</b>	<b>1</b>	<b>Cause Unknown</b>	<b>85.25</b>
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**1.959**
10. REPORTING YEAR (SAIDI)  
**2.24**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0693**
12. REPORTING YEAR (SAIFI)  
**0.0474**
13. CORRECTIVE ACTION PLAN

very short circuit with few outage. One unknown outage.

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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)  
**ROWAN, KY 32, MOREHEAD**
3. CIRCUIT NAME AND NUMBER  
**INTERCHANGE OCR 114**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**MOREHEAD, KY 32, INTERSTATE**
5. TOTAL CIRCUIT LENGTH (MILES)  
**20**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**596**
- 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	0.16	Tree Failure	0.68	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	1.26	Public Cut Tree	0
Decay/Age Equip	0	Lightning	57.87	Public Other	0
Corrosion/Abrasion	0	Wind	30.95	Other	0
Tree w/ Wind	6.24	Small Animal	2.29	Cause Unknown	0.54

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**20.16**
10. REPORTING YEAR (SAIDI)  
**83.27**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0994**
12. REPORTING YEAR (SAIFI)  
**0.7226**
13. CORRECTIVE ACTION PLAN

**Lightning was largest cause. Will investigate lightning protection**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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, PEASTICKS, PEASTICKS**
3. CIRCUIT NAME AND NUMBER  
**MOORES FERRY OCR 224**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**PEASTICKS, KY 111**
5. TOTAL CIRCUIT LENGTH (MILES)  
**47.2**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**572**
- 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

Equipment Failure	40.77	Tree Failure	0.04	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	43.79	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	1.32	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0
Tree w/ wind	0	Small Animal	0.02	Cause Unknown	14.06

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**58.67**
10. REPORTING YEAR (SAIDI)  
**226.43**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.264**
12. REPORTING YEAR (SAIFI)  
**0.84**
13. CORRECTIVE ACTION PLAN

Spacer cable bracket broke and phase got into neutral on one large outage.

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

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## 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**
3. CIRCUIT NAME AND NUMBER  
**MUDLICK 244**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**FOXPOR, KY 59**
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	0.18	Tree Failure	8.98	Animal	0.03
Installation Fault	0.43	Tree w/ Ice	8.53	Cust Caused	0.06
Conductor Sag	0	In-house Tree	0	Motor Vehicle	5.22
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0.11	Lightning	3.15	Public Other	0
Corrosion/Abrasion	0	Wind	6.04	Other	57.07
Tree w/ wind	3.17	Small Animal	0.95	Cause Unknown	3.31

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**47.3**
10. REPORTING YEAR (SAIDI)  
**103.52**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.357**
12. REPORTING YEAR (SAIFI)  
**0.5714**
13. CORRECTIVE ACTION PLAN

**Jumper burnt off was large unknown cause.**

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

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## 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

Equipment Failure	0.11	Tree Failure	6.61	Animal	0
Installation Fault	0	Tree w/ wind	17.81	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0
Overload	0	Tree out of ROW	11.18	Public Cut Tree	1.44
Decay/Age Equip	0	Lightning	6.7	Public Other	0
Corrosion/Abrasion	0	Wind	39.98	Other	0
Tree Growth	0.09	Small Animal	0.09	Cause Unknown	15.25

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**58.5**
10. REPORTING YEAR (SAIDI)  
**83.47**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.615**
12. REPORTING YEAR (SAIFI)  
**0.494**
13. CORRECTIVE ACTION PLAN

**Wind was the largest outage contributor.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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, RECTORVILL, MASON COUNTY**
3. CIRCUIT NAME AND NUMBER  
**PLUMVILLE OCR 234**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**KY 9, PLUMVILLE**
5. TOTAL CIRCUIT LENGTH (MILES)  
**76**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**944**
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	19.11	Tree Failure	2.13	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0.19
Conductor Sag	0	In-house Tree	0	Motor Vehicle	54.05
Overload	0	Tree out of ROW	0	Public Cut Tree	0.16
Decay/Age Equip	0.25	Lightning	2.75	Public Other	0
Corrosion/Abrasion	0	Wind	4.92	Other	0.34
Tree Growth	0.25	Small Animal	0.64	Cause Unknown	8.62

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**47.01**
10. REPORTING YEAR (SAIDI)  
**52.47**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.436**
12. REPORTING YEAR (SAIFI)  
**0.312**
13. CORRECTIVE ACTION PLAN

**Motor vehicle is the largest cause.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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)  
**ROWAN, KY 801, SHARKEY**
3. CIRCUIT NAME AND NUMBER  
**SHARKEY OCR 234**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**SHARKEY, KY 801**
5. TOTAL CIRCUIT LENGTH (MILES)  
**40.6**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**580**
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	0.96	Tree Failure	44.46	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	20.8
Overload	0	Tree out of ROW	27.92	Public Cut Tree	0
Decay/Age Equip	0	Lightning	4.32	Public Other	0
Corrosion/Abrasion	0	Wind	0	Other	0.58
Tree Growth	0.29	Small Animal	0	Cause Unknown	0.53

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**41.42**
10. REPORTING YEAR (SAIDI)  
**53.26**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.254**
12. REPORTING YEAR (SAIFI)  
**0.219**
13. CORRECTIVE ACTION PLAN

One large tree failure outage. ROW has stayed on schedule.

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



# KENTUCKY PUBLIC SERVICE COMMISSION

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## 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  
**MUPHYSVILLE**
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)  
**MASON, MURPHYSVILLE**
3. CIRCUIT NAME AND NUMBER  
**STRODES RUN OCR 244**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**MAYSLICK, US 68**
5. TOTAL CIRCUIT LENGTH (MILES)  
**29.4**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**104**
- 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	1.21	Tree Failure	0	Animal	17
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	6.97	Lightning	9.42	Public Other	0
Corrosion/Abrasion	0	Wind	0.0138	Other	1.13
Tree w/ wind	55.82	Small Animal	0	Cause Unknown	0

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**2.57**
10. REPORTING YEAR (SAIDI)  
**6.47**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.0418**
12. REPORTING YEAR (SAIFI)  
**0.0885**
13. CORRECTIVE ACTION PLAN

**Trees with wind is largest cause.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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  
**TILTON OCR 204**
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)  
**TILTON, KY 11**
5. TOTAL CIRCUIT LENGTH (MILES)  
**80.4**
6. CUSTOMER COUNT FOR THIS CIRCUIT  
**644**
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	0.76	Tree Failure	0.02	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0.02
Overload	0	Tree out of ROW	0.04	Public Cut Tree	0
Decay/Age Equip	0	Lightning	18.16	Public Other	0
Corrosion/Abrasion	0.05	Wind	66.47	Other	0
Tree Growth	0.02	Small Animal	1.21	Cause Unknown	13.2

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**29.47**
10. REPORTING YEAR (SAIDI)  
**41.25**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.199**
12. REPORTING YEAR (SAIFI)  
**0.402**
13. CORRECTIVE ACTION PLAN

**Wind was the largest outage cause.**

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

# KENTUCKY PUBLIC SERVICE COMMISSION

## 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

Equipment Failure	0.84	Tree Failure	0.08	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	0
Conductor Sag	0	In-house Tree	0	Motor Vehicle	46
Overload	0	Tree out of ROW	0	Public Cut Tree	0
Decay/Age Equip	0	Lightning	4.85	Public Other	0
Corrosion/Abrasion	0	Wind	2.49	Other	3.44
Tree w/ wind	31	Small Animal	1.51	Cause Unknown	9.49

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**9.99**
10. REPORTING YEAR (SAIDI)  
**31.68**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.186**
12. REPORTING YEAR (SAIFI)  
**0.1409**
13. CORRECTIVE ACTION PLAN

**Trees with wind is the largest cause.**

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

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## SECTION 5: CIRCUIT REPORTING

# KENTUCKY PUBLIC SERVICE COMMISSION

(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	0.01	Tree Failure	2.34	Animal	0
Installation Fault	0.01	Tree w/ Ice	0	Cust Caused	0.18
Conductor Sag	0	In-house Tree	0	Motor Vehicle	0.49
Overload	0	Tree out of ROW	5.21	Public Cut Tree	0.01
Decay/Age Equip	11.72	Lightning	0.06	Public Other	0
Corrosion/Abrasion	0.26	Wind	0.04	Other	0.08
Tree w/ wind	73.33	Small Animal	0.17	Cause Unknown	5.37

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)

**116.46**

10. REPORTING YEAR (SAIDI)

**228.95**

11. CIRCUIT 5 YEAR AVERAGE (SAIFI)

**0.905**

12. REPORTING YEAR (SAIFI)

**2.04**

13. CORRECTIVE ACTION PLAN

**Tree with wind is the largest cause.**

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

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## SECTION 5: CIRCUIT REPORTING

(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)

# KENTUCKY PUBLIC SERVICE COMMISSION

(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	54.79	Tree Failure	0	Animal	0
Installation Fault	0	Tree w/ Ice	0	Cust Caused	33.68
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	6.74	Public Other	0
Corrosion/Abrasion	0	Wind	1.15	Other	0.07
Tree Growth	0	Small Animal	1.11	Cause Unknown	2.17

9. CIRCUIT 5 YEAR AVERAGE (SAIDI)  
**13.97**
10. REPORTING YEAR (SAIDI)  
**57.64**
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)  
**0.186**
12. REPORTING YEAR (SAIFI)  
**0.298**
13. CORRECTIVE ACTION PLAN

**Insulator outage was the large outage that led to the equipment failure being the highest cause.**

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

2019 - HILDA (CRANSTON), HILLSBORO, PLUMMERS LANDING (MUSES MILL, HILLSBORO)

Trimming Cycle - 6 years

Spaying Cycle - 3 years