

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	Cumberland Valley Electric, Inc.
REPORT PREPARED BY	Steve Hampton
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PHONE NUMBER OF PREPARER	606-524-1374

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2022
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SECTION 3: MAJOR EVENT DAYS (MED)

T_{MED}	38.222
FIRST DATE USED TO DETERMINE T_{MED}	1/1/2022
LAST DATE USED TO DETERMINE T_{MED}	12/31/2022
NUMBER OF MED IN REPORT YEAR	5

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	24190	TOTAL CIRCUITS	59
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Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	286.98	SAIDI	286.3
SAIFI	1.381	SAIFI	2.699

Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	950.98	SAIDI	1050.1
SAIFI	3.933	SAIFI	4.399

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
Alex Creek (110)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox Alex Creek Rd Scalf
3. CIRCUIT NAME AND NUMBER
Stinking Creek (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hwy 718 Hwy 223
5. TOTAL CIRCUIT LENGTH (MILES)
82.15
6. CUSTOMER COUNT FOR THIS CIRCUIT
554
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
See Attached Exhibit A
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
573.7602
10. REPORTING YEAR (SAIDI)
349.5832
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.0185
12. REPORTING YEAR (SAIFI)
2.2769
13. CORRECTIVE ACTION PLAN
Update fuses.

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

Cumberland Valley Electric

Substation: Alex Creek

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	0.93%
11	Fire	0.93%
13	Bad R/W (includes kudzu)	7.48%
14	Small Animals or Birds	16.82%
19	Company Crew Incident	0.93%
2	Tree- on R/W	4.67%
3	Tree- off R/W	11.21%
5	Storm	55.14%
6	Material or Equipment Failure	1.87%

EXHIBIT A

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 #2:

1. SUBSTATION NAME AND NUMBER
Carpenter (85)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 92E Carpenter
3. CIRCUIT NAME AND NUMBER
Williamsburg (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 92/HWY 904
5. TOTAL CIRCUIT LENGTH (MILES)
142
6. CUSTOMER COUNT FOR THIS CIRCUIT
975
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2018
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Exhibit B
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
878.1427
10. REPORTING YEAR (SAIDI)
764.3291
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
4.6852
12. REPORTING YEAR (SAIFI)
4.413
13. CORRECTIVE ACTION PLAN
Cut right of way and update fuses.

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

Cumberland Valley Electric

Substation: Carpenter

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	0.50%
14	Small Animals or Birds	2.97%
3	Tree- off R/W	3.47%
5	Storm	92.08%
6	Material or Equipment Failure	0.50%
99	Unknown	0.50%

EXHIBIT B

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 #3:

1. SUBSTATION NAME AND NUMBER
Carpenter (85)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 92E Carpenter
3. CIRCUIT NAME AND NUMBER
Hwy 11 (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hwy 11
5. TOTAL CIRCUIT LENGTH (MILES)
136
6. CUSTOMER COUNT FOR THIS CIRCUIT
855
- 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
See Attached Exhibit C
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
854.4893
10. REPORTING YEAR (SAIDI)
1153.638
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.8669
12. REPORTING YEAR (SAIFI)
6.2098
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses

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

Cumberland Valley Electric

Substation: Carpenter

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	1.35%
14	Small Animals or Birds	3.59%
2	Tree- on R/W	0.45%
3	Tree- off R/W	1.35%
5	Storm	90.13%
6	Material or Equipment Failure	2.24%
99	Unknown	0.90%

EXHIBIT C

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 #4:

1. SUBSTATION NAME AND NUMBER
Carpenter (85)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 92E Carpenter
3. CIRCUIT NAME AND NUMBER
Frakes (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 190
5. TOTAL CIRCUIT LENGTH (MILES)
136
6. CUSTOMER COUNT FOR THIS CIRCUIT
951
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit D
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
958.3097
10. REPORTING YEAR (SAIDI)
1714.223
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
4.3453
12. REPORTING YEAR (SAIFI)
8.6744
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Carpenter

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	2.24%
14	Small Animals or Birds	1.92%
19	Company Crew Incident	0.32%
2	Tree- on R/W	0.96%
3	Tree- off R/W	6.39%
5	Storm	84.66%
6	Material or Equipment Failure	1.60%
99	Unknown	1.92%

EXHIBIT D

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 #5:

1. SUBSTATION NAME AND NUMBER
Chad (103)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan HWY 522 Cumberland
3. CIRCUIT NAME AND NUMBER
Linefork (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 510
5. TOTAL CIRCUIT LENGTH (MILES)
31
6. CUSTOMER COUNT FOR THIS CIRCUIT
244
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit E
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
466.3634
10. REPORTING YEAR (SAIDI)
694.4493
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.508
12. REPORTING YEAR (SAIFI)
4.7869
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Chad

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
110	Scheduled Maintenance	1.09%
13	Bad R/W (includes kudzu)	9.78%
2	Tree- On R/W	5.43%
3	Tree- Off R/W	22.83%
5	Storm	57.61%
6	Material or Equipment Failure	3.26%

EXHIBIT E

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 #6:

1. SUBSTATION NAME AND NUMBER
Chad (103)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan HWY 522 Cumberland
3. CIRCUIT NAME AND NUMBER
Kingdom Come (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 160
5. TOTAL CIRCUIT LENGTH (MILES)
19
6. CUSTOMER COUNT FOR THIS CIRCUIT
145
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit F
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1107.796
10. REPORTING YEAR (SAIDI)
1966.681
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
4.4323
12. REPORTING YEAR (SAIFI)
7.5608
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses.

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

Cumberland Valley Electric

Substation: Chad

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
110	Scheduled Maintenance	3.88%
13	Bad (R/W includes kudzu)	1.94%
14	Small Animals or Birds	0.97%
3	Tree- Off R/W	10.68%
5	Storm	78.64%
6	Material or Equipment Failure	2.91%
77	Public Cut Tree	0.97%

EXHIBIT F

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 #7:

1. SUBSTATION NAME AND NUMBER
Chad (103)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan HWY 522 Cumberland
3. CIRCUIT NAME AND NUMBER
Cumberland (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 119
5. TOTAL CIRCUIT LENGTH (MILES)
19
6. CUSTOMER COUNT FOR THIS CIRCUIT
138
- 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
See Attached Exhibit G
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
499.0674
10. REPORTING YEAR (SAIDI)
156.1556
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.9803
12. REPORTING YEAR (SAIFI)
1.1394
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses.

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

Cumberland Valley Electric

Substation: Chad

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
2	Tree- On R/W	18.75%
5	Storm	81.25%

EXHIBIT G

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 #8:

1. SUBSTATION NAME AND NUMBER
Chad (103)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan HWY 522 Cumberland
3. CIRCUIT NAME AND NUMBER
Putney (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 522
5. TOTAL CIRCUIT LENGTH (MILES)
47
6. CUSTOMER COUNT FOR THIS CIRCUIT
450
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit H
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
380.1853
10. REPORTING YEAR (SAIDI)
614.3835
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.6968
12. REPORTING YEAR (SAIFI)
5.4581
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses

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

Cumberland Valley Electric

Substation: Chad

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	4.20%
14	Small Animals or Birds	2.52%
2	Tree- On R/W	14.29%
3	Tree- Off R/W	21.01%
5	Storm	55.46%
6	Material or Equipment Failure	1.68%
99	Unknown	0.84%

EXHIBIT H

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 #9:

1. SUBSTATION NAME AND NUMBER
Cumberland Falls (26)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Corbin
3. CIRCUIT NAME AND NUMBER
Cumberland Falls (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hwy 90
5. TOTAL CIRCUIT LENGTH (MILES)
61
6. CUSTOMER COUNT FOR THIS CIRCUIT
478
- 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
See Attached Exhibit I
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1066.808
10. REPORTING YEAR (SAIDI)
2481.517
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.9302
12. REPORTING YEAR (SAIFI)
4.0923
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses.

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

Cumberland Valley Electric
Substation: Cumberland Falls
Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
11	Fire	1.04%
120	Contractor, CVE	1.04%
13	Bad R/W (includes kudzu)	1.04%
14	Small Animals or Birds	8.33%
2	Tree- On R/W	6.25%
3	Tree- Off R/W	2.08%
4	Scheduled Outage	2.08%
5	Storm	73.96%
6	Material or Equipment Failure	3.12%
94	Bad Connector	1.04%

EXHIBIT I

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 #10:

1. SUBSTATION NAME AND NUMBER
Cumberland Falls (26)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Corbin
3. CIRCUIT NAME AND NUMBER
Bee Creek (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 1193 Corbin
5. TOTAL CIRCUIT LENGTH (MILES)
65
6. CUSTOMER COUNT FOR THIS CIRCUIT
698
- 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
See Attached Exhibit J
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
849.9357
10. REPORTING YEAR (SAIDI)
1960.198
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.2255
12. REPORTING YEAR (SAIFI)
5.009
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses.

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

Cumberland Valley Electric
Substation: Cumberland Falls
Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
10	Electrical Overload	2.08%
110	Scheduled Maintenance	1.04%
13	Bad R/W (includes kudzu)	2.08%
14	Small Animals or Birds	17.71%
2	Tree- On R/W	4.17%
3	Tree- Off R/W	5.21%
5	Storm	62.50%
6	Material or Equipment Failure	3.12%
99	Unknown	2.08%

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 #11:

1. SUBSTATION NAME AND NUMBER
Cumberland Falls (26)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Corbin
3. CIRCUIT NAME AND NUMBER
Goldbug (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 25W
5. TOTAL CIRCUIT LENGTH (MILES)
26
6. CUSTOMER COUNT FOR THIS CIRCUIT
246
- 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
See Attached Exhibit K
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
315.9633
10. REPORTING YEAR (SAIDI)
469.5368
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
1.4581
12. REPORTING YEAR (SAIFI)
2.8022
13. CORRECTIVE ACTION PLAN
Update fuses.

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

Cumberland Valley Electric
Substation: Cumberland Falls
Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
14	Small Animals or Birds	16.98%
2	Tree- On R/W	5.66%
5	Storm	71.70%
6	Material or Equipment Failure	5.66%

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 #12:

1. SUBSTATION NAME AND NUMBER
Emanuel (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 229 Gray
3. CIRCUIT NAME AND NUMBER
Horse Hollow (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hwy 11 N
5. TOTAL CIRCUIT LENGTH (MILES)
24
6. CUSTOMER COUNT FOR THIS CIRCUIT
304
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2017
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit L
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
508.6663
10. REPORTING YEAR (SAIDI)
473.9389
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.2471
12. REPORTING YEAR (SAIFI)
4.3568
13. CORRECTIVE ACTION PLAN
Cut right of way and update fuses

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

Cumberland Valley Electric

Substation: Emanuel

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	1.25%
13	Bad R/W (includes kudzu)	2.50%
14	Small Animals or Birds	17.50%
18	Large Animals	1.25%
2	Tree- On R/W	3.75%
5	Storm	72.50%
99	Unknown	1.25%

EXHIBIT L

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 #13:

1. SUBSTATION NAME AND NUMBER
Emanuel (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 229 Gray
3. CIRCUIT NAME AND NUMBER
GR Hampton School (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 11S
5. TOTAL CIRCUIT LENGTH (MILES)
80
6. CUSTOMER COUNT FOR THIS CIRCUIT
815
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2019
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit M
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
794.4623
10. REPORTING YEAR (SAIDI)
825.9843
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
4.2965
12. REPORTING YEAR (SAIFI)
5.2681
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Emanuel

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
100	Scheduled Construction	0.68%
13	Bad R/W (includes kudzu)	4.79%
14	Small Animals or Birds	20.55%
2	Tree- On R/W	10.27%
3	Tree- Off R/W	7.53%
32	Conductor Sag/ Low Clearence	0.68%
5	Storm	50.00%
6	Material or Equipment Failure	2.05%
7	Vehicle Accident	1.37%
94	Bad Connector	0.68%
99	Unknown	1.37%

EXHIBIT M

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 #14:

1. SUBSTATION NAME AND NUMBER
Emanuel (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 229 Gray
3. CIRCUIT NAME AND NUMBER
CVE (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 25E
5. TOTAL CIRCUIT LENGTH (MILES)
107
6. CUSTOMER COUNT FOR THIS CIRCUIT
986
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2017
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit N
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
473.6626
10. REPORTING YEAR (SAIDI)
569.2905
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.456
12. REPORTING YEAR (SAIFI)
4.2229
13. CORRECTIVE ACTION PLAN
Cut right of way.

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

Cumberland Valley Electric

Substation: Emanuel

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
100	Scheduled Construction	0.39%
11	Fire	0.78%
13	Bad R/W (includes kudzu)	1.94%
14	Small Animals or Birds	11.63%
19	Company Crew Incident	0.39%
2	Tree- On R/W	10.08%
3	Tree- Off R/W	11.63%
5	Storm	53.49%
6	Material or Equipment Failure	1.94%
7	Vehicle Accident	0.78%
77	Public Cut Tree	0.39%
99	Unknown	6.59%

EXHIBIT N

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 #15:

1. SUBSTATION NAME AND NUMBER
Girdler (106)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 11 N Girdler
3. CIRCUIT NAME AND NUMBER
Woolum (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 11 N
5. TOTAL CIRCUIT LENGTH (MILES)
69
6. CUSTOMER COUNT FOR THIS CIRCUIT
500
- 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
See Attached Exhibit O
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
185.368
10. REPORTING YEAR (SAIDI)
105.346
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
1.2304
12. REPORTING YEAR (SAIFI)
1.1508
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Girdler

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	1.61%
13	Bad R/W (includes kudzu)	3.23%
14	Small Animals or Birds	27.42%
2	Tree- On R/W	14.52%
3	Tree- Off R/W	11.29%
5	Storm	37.10%
6	Material or Equipment Failure	1.61%
77	Public Cut Tree	1.61%
99	Unknown	1.61%

EXHIBIT O

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 #16:

1. SUBSTATION NAME AND NUMBER
Girdler (106)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 11 N Girdler
3. CIRCUIT NAME AND NUMBER
HWY 1304 (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 1304 Bimble
5. TOTAL CIRCUIT LENGTH (MILES)
33
6. CUSTOMER COUNT FOR THIS CIRCUIT
411
- 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
See Attached Exhibit P
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
220.1816
10. REPORTING YEAR (SAIDI)
104.4698
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
1.294
12. REPORTING YEAR (SAIFI)
1.5107
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Girdler

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
14	Small Animals or Birds	46.88%
3	Tree- Off R/W	3.12%
5	Storm	37.50%
6	Material or Equipment Failure	6.25%
7	Vehicle Accident	6.25%

EXHIBIT P

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 #17:

1. SUBSTATION NAME AND NUMBER
Girdler (106)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 11 N Girdler
3. CIRCUIT NAME AND NUMBER
Crane's Nest (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 1803
5. TOTAL CIRCUIT LENGTH (MILES)
46
6. CUSTOMER COUNT FOR THIS CIRCUIT
381
- 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
See Attached Exhibit Q
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
536.3677
10. REPORTING YEAR (SAIDI)
727.8684
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
1.9147
12. REPORTING YEAR (SAIFI)
3.1538
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Girdler

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
100	Scheduled Construction	1.82%
14	Small Animals or Birds	10.91%
2	Tree- On R/W	30.91%
3	Tree- Off R/W	5.45%
5	Storm	45.45%
6	Material or Equipment Failure	1.82%
7	Vehicle Accident	1.82%
75	Dig in Primary	1.82%

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 #18:

1. SUBSTATION NAME AND NUMBER
Girdler (106)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 11 N Girdler
3. CIRCUIT NAME AND NUMBER
Cannon
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 11 N
5. TOTAL CIRCUIT LENGTH (MILES)
13
6. CUSTOMER COUNT FOR THIS CIRCUIT
174
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2017
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit R
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
200.473
10. REPORTING YEAR (SAIDI)
53.3512
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.2883
12. REPORTING YEAR (SAIFI)
1.1119
13. CORRECTIVE ACTION PLAN
Cut right of way

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

Cumberland Valley Electric

Substation: Girdler

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
11	Fire	3.85%
14	Small Animals or Birds	38.46%
2	Tree- On R/W	26.92%
3	Tree- Off R/W	15.38%
5	Storm	11.54%
77	Public Cut Tree	3.85%

EXHIBIT R

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 #19:

1. SUBSTATION NAME AND NUMBER
Goldbug (64)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Williamsburg
3. CIRCUIT NAME AND NUMBER
Williamsburg Plastics (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 25W Williamsburg
5. TOTAL CIRCUIT LENGTH (MILES)
21
6. CUSTOMER COUNT FOR THIS CIRCUIT
238
- 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
See Attached Exhibit S
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
641.2014
10. REPORTING YEAR (SAIDI)
1273.253
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.6359
12. REPORTING YEAR (SAIFI)
6.2248
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Goldbug

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	3.51%
14	Small Animals or Birds	8.77%
2	Tree- On R/W	10.53%
3	Tree- Off R/W	1.75%
5	Storm	64.91%
6	Material or Equipment Failure	1.75%
7	Vehicle Accident	3.51%
9	Lightning	1.75%
94	Bad Connector	1.75%
99	Unknown	1.75%

EXHIBIT S

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 #20:

1. SUBSTATION NAME AND NUMBER
Goldbug (64)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Williamsburg
3. CIRCUIT NAME AND NUMBER
Red Bird (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 478
5. TOTAL CIRCUIT LENGTH (MILES)
84
6. CUSTOMER COUNT FOR THIS CIRCUIT
576
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2021
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit T
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1109.781
10. REPORTING YEAR (SAIDI)
2333.72
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.838
12. REPORTING YEAR (SAIFI)
5.8028
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Goldbug

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	1.09%
14	Small Animals or Birds	7.61%
2	Tree- On R/W	19.57%
3	Tree- Off R/W	4.35%
5	Storm	63.04%
6	Material or Equipment Failure	1.09%
7	Vehicle Accident	1.09%
9	Lightning	2.17%

EXHIBIT T

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 #21:

1. SUBSTATION NAME AND NUMBER
Goldbug (64)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 25W Williamsburg
3. CIRCUIT NAME AND NUMBER
High School (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Whitley County High School Williamsburg
5. TOTAL CIRCUIT LENGTH (MILES)
7
6. CUSTOMER COUNT FOR THIS CIRCUIT
96
- 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
See Attached Exhibit U
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
190.8251
10. REPORTING YEAR (SAIDI)
200.1039
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
0.9357
12. REPORTING YEAR (SAIFI)
1.5816
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Goldbug

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	6.67%
14	Small Animals or Birds	33.33%
3	Tree- Off R/W	13.33%
5	Storm	33.33%
6	Material or Equipment Failure	13.33%

EXHIBIT U

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 #22:

1. SUBSTATION NAME AND NUMBER
Hinkle (53)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 1304 Bimble
3. CIRCUIT NAME AND NUMBER
Artemus (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 225
5. TOTAL CIRCUIT LENGTH (MILES)
67
6. CUSTOMER COUNT FOR THIS CIRCUIT
467
- 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
See Attached Exhibit V
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
894.6707
10. REPORTING YEAR (SAIDI)
478.8313
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.0543
12. REPORTING YEAR (SAIFI)
4.6372
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses

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

Cumberland Valley Electric

Substation: Hinkle

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	1.89%
10	Electrical Overload	1.89%
14	Small Animals or Birds	3.77%
2	Tree- On R/W	11.32%
3	Tree- Off R/W	3.77%
5	Storm	75.47%
77	Public Cut Tree	1.89%

EXHIBIT V

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 #23:

1. SUBSTATION NAME AND NUMBER
Hinkle (53)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Knox HWY 1304 Bimble
3. CIRCUIT NAME AND NUMBER
Shy Mug (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hwy 11 N
5. TOTAL CIRCUIT LENGTH (MILES)
32
6. CUSTOMER COUNT FOR THIS CIRCUIT
349
- 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
See Attached Exhibit W
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
368.0669
10. REPORTING YEAR (SAIDI)
321.9906
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.0494
12. REPORTING YEAR (SAIFI)
2.2005
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses

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

Cumberland Valley Electric

Substation: Hinkle

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
14	Small Animals or Birds	11.36%
2	Tree- On R/W	4.55%
5	Storm	84.09%

EXHIBIT W

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 #24:

1. SUBSTATION NAME AND NUMBER
Jellico (41)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 92W Williamsburg
3. CIRCUIT NAME AND NUMBER
Aisile (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Aisile Rd Williamsburg
5. TOTAL CIRCUIT LENGTH (MILES)
48
6. CUSTOMER COUNT FOR THIS CIRCUIT
249
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2022/2023
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit X
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1194.083
10. REPORTING YEAR (SAIDI)
2478.377
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.1593
12. REPORTING YEAR (SAIFI)
4.9495
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Jellico

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
13	Bad R/W (includes kudzu)	3.51%
14	Small Animals or Birds	10.53%
2	Tree- On R/W	15.79%
3	Tree- Off R/W	1.75%
5	Storm	63.16%
6	Material or Equipment Failure	3.51%
9	Lightning	1.75%

EXHIBIT X

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 #25:

1. SUBSTATION NAME AND NUMBER
Jellico (41)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 92W Williamsburg
3. CIRCUIT NAME AND NUMBER
Pine Knot (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 92W
5. TOTAL CIRCUIT LENGTH (MILES)
77
6. CUSTOMER COUNT FOR THIS CIRCUIT
456
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2022/2023
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit Y
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1939.254
10. REPORTING YEAR (SAIDI)
2730.707
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
5.548
12. REPORTING YEAR (SAIFI)
7.5314
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: Jellico

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
11	Fire	1.74%
13	Bad R/W (includes kudzu)	4.35%
14	Small Animals or Birds	4.35%
2	Tree- On R/W	13.91%
3	Tree- Off R/W	3.48%
5	Storm	66.09%
6	Material or Equipment Failure	1.74%
9	Lightning	4.35%

EXHIBIT Y

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 #26:

1. SUBSTATION NAME AND NUMBER
Liberty Church (107)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 3436 Corbin
3. CIRCUIT NAME AND NUMBER
Dowis Chapel
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 6 Corbin
5. TOTAL CIRCUIT LENGTH (MILES)
96
6. CUSTOMER COUNT FOR THIS CIRCUIT
696
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2018
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit Z
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
3004.851
10. REPORTING YEAR (SAIDI)
13457.79
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
12.5633
12. REPORTING YEAR (SAIFI)
48.8619
13. CORRECTIVE ACTION PLAN
Cut right of way and update fuses.

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

Cumberland Valley Electric

Substation: Liberty Church

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
1	Power Supplier	0.61%
11	Fire	1.83%
13	Bad R/W (includes kudzu)	1.83%
14	Small Animals or Birds	9.15%
2	Tree- On R/W	14.63%
3	Tree- Off R/W	2.44%
5	Storm	64.63%
6	Material or Equipment Failure	0.61%
7	Vehicle Accident	1.22%
9	Lightning	2.44%
99	Unknown	0.61%

EXHIBIT Z

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 #27:

1. SUBSTATION NAME AND NUMBER
Pine Mountain (50)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan E HWY 22 Bledsoe
3. CIRCUIT NAME AND NUMBER
Bledsoe (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 221
5. TOTAL CIRCUIT LENGTH (MILES)
26
6. CUSTOMER COUNT FOR THIS CIRCUIT
115
- 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
See Attached Exhibit AA
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
344.8323
10. REPORTING YEAR (SAIDI)
392.5843
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.0024
12. REPORTING YEAR (SAIFI)
1.9525
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses

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

Cumberland Valley Electric

Substation: Pine Mountain

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
110	Scheduled Maintenance	4.88%
13	Bad R/W (includes kudzu)	4.88%
2	Tree- On R/W	4.88%
3	Tree- Off R/W	7.32%
5	Storm	78.05%

EXHIBIT AA

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 #28:

1. SUBSTATION NAME AND NUMBER
Pine Mountain (50)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Harlan E HWY 22 Bledsoe
3. CIRCUIT NAME AND NUMBER
Line Fork (3)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 510
5. TOTAL CIRCUIT LENGTH (MILES)
37
6. CUSTOMER COUNT FOR THIS CIRCUIT
155
- 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
See Attached Exhibit BB
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
348.3517
10. REPORTING YEAR (SAIDI)
1078.996
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.0436
12. REPORTING YEAR (SAIFI)
3.4227
13. CORRECTIVE ACTION PLAN
Line inspection and update fuses.

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

Cumberland Valley Electric

Substation: Pine Mountain

Feeder: 3

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
110	Scheduled Maintenance	12.90%
13	Bad R/W (includes kudzu)	9.68%
2	Tree- On R/W	3.23%
3	Tree- Off R/W	32.26%
5	Storm	25.81%
77	Public Cut Tree	16.13%

EXHIBIT BB

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 #29:

1. SUBSTATION NAME AND NUMBER
Rockhold (22)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley HWY 779 Rockhold
3. CIRCUIT NAME AND NUMBER
Meadow Creek (2)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 779 Rockhold
5. TOTAL CIRCUIT LENGTH (MILES)
50
6. CUSTOMER COUNT FOR THIS CIRCUIT
334
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2018
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE N
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit CC
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
1004.166
10. REPORTING YEAR (SAIDI)
1741.49
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.7727
12. REPORTING YEAR (SAIFI)
4.0545
13. CORRECTIVE ACTION PLAN
Cut right of way and update fuses.

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

Cumberland Valley Electric

Substation: Rockhold

Feeder: 2

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
100	Scheduled Construction	1.79%
14	Small Animals or Birds	14.29%
2	Tree- On R/W	3.57%
3	Tree- Off R/W	7.14%
5	Storm	73.21%

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 #30:

1. SUBSTATION NAME AND NUMBER
South Corbin (45)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley Catalpa Way Corbin
3. CIRCUIT NAME AND NUMBER
Hightop (1)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
Hightop Rd Corbin
5. TOTAL CIRCUIT LENGTH (MILES)
50
6. CUSTOMER COUNT FOR THIS CIRCUIT
668
- 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
See Attached Exhibit EE
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
619.1593
10. REPORTING YEAR (SAIDI)
1021.8646
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
3.0523
12. REPORTING YEAR (SAIFI)
6.0015
13. CORRECTIVE ACTION PLAN
Cut right of way and update fuses.

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

Cumberland Valley Electric

Substation: South Corbin

Feeder: 1

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
10	Electrical Overload	1.72%
14	Small Animals or Birds	20.69%
2	Tree- On R/W	1.72%
3	Tree- Off R/W	1.72%
5	Storm	67.24%
6	Material or Equipment Failure	5.17%
99	Unknown	1.72%

EXHIBIT EE

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 #31:

1. SUBSTATION NAME AND NUMBER
South Corbin (45)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley Catalpa Way Corbin
3. CIRCUIT NAME AND NUMBER
Interstate (4)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 25W Corbin
5. TOTAL CIRCUIT LENGTH (MILES)
9
6. CUSTOMER COUNT FOR THIS CIRCUIT
167
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUM
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit FF
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
266.3773
10. REPORTING YEAR (SAIDI)
203.5889
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
1.6508
12. REPORTING YEAR (SAIFI)
0.7069
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: South Corbin

Feeder: 4

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
14	Small Animals or Birds	20.00%
3	Tree- Off R/W	20.00%
5	Storm	50.00%
99	Unknown	10.00%

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 #32:

1. SUBSTATION NAME AND NUMBER
South Corbin (45)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN)
Whitley Catalpa Way Corbin
3. CIRCUIT NAME AND NUMBER
5th Street (5)
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)
HWY 727 Corbin
5. TOTAL CIRCUIT LENGTH (MILES)
58
6. CUSTOMER COUNT FOR THIS CIRCUIT
800
- 7.. DATE OF LAST CIRCUIT TRIM (VM)
2020
8. LIST OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUM
NUMBERS REPRESENTED BY EACH CAUSE
See Attached Exhibit GG
9. CIRCUIT 5 YEAR AVERAGE (SAIDI)
715.7757
10. REPORTING YEAR (SAIDI)
2948.3223
11. CIRCUIT 5 YEAR AVERAGE (SAIFI)
2.7257
12. REPORTING YEAR (SAIFI)
8.6682
13. CORRECTIVE ACTION PLAN
Update fuses

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

Cumberland Valley Electric

Substation: South Corbin

Feeder: 5

8. List Outages Causes by Circuit with Percentage of Total Outage Numbers by Cause

Cause Code	Description	% of Contribution to Total for Circuit
14	Small Animals or Birds	10.45%
2	Tree- On R/W	5.97%
3	Tree- Off R/W	1.49%
5	Storm	73.13%
6	Material or Equipment Failure	7.46%
94	Bad Connector	1.49%

EXHIBIT GG

KENTUCKY PUBLIC SERVICE COMMISSION

SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

INCLUDE CURRENT VEGETATION MANAGEMENT PLAN

Additional page may be attached as needed.

See Attached Exhibit DD.

SECTION 7: UTILITY COMMENTS

Cumberland Valley Electric
Operations and Engineering Department
6219 US Hwy 25E
Gray, KY 40734
606-528-2677

VEGETATION MANAGEMENT PLAN
GUIDELINES, METHODS
AND PROCEDURES

January 1, 2018

EXHIBIT DD

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Section 1.0 Definitions

- A. "CVE" shall mean Cumberland Valley Electric Cooperative
- B. "Contractor" shall mean the successful Bidder to whom a Contract is awarded.
- C. "Work" shall refer to everything agreed to be done and furnished by the Contractor including all supervision, supplies, labor, transportation and equipment together with all responsibilities and obligations imposed by the Contract Documents.
- D. "Equipment" shall mean the trucks, trailers, tools, saws, and other apparatus which are owned and operated by the Contractor for the performance of the Contract in accordance with the Specifications.
- E. "Specifications" shall mean all specifications pertaining to the Work to be performed.
- F. "Contract" shall mean the fully executed document which binds the interested parties in an agreement to fulfill all terms, conditions, and specifications.
- G. "Invitation for Bids" shall be the means by which CVE solicits bids from Pre-Qualified Contractors for Work which CVE may from time to time deem necessary to have performed.
- H. "Install", "Furnish", "Provide" or words of like import shall mean the Contractor shall install, furnish, or provide and similarly the words "Approved", "Authorized", "Required", "Satisfactory", "Acceptable" or words of like import shall mean, as applicable, approved by, required by, satisfactory to, or acceptable to CVE, unless otherwise expressly stated.
- I. "Prequalified Contractor" shall mean a contractor who is determined by CVE to be eligible to bid on the Work, subject to any of CVE's conditions, but such status shall not imply or infer compliance with any of the requirements of the Contract, Specifications or other Contract Documents.
- J. "Tree" shall mean any woody vegetation with a DBH (Diameter at Breast Height) of 4 inches or greater.
- K. "Brush" shall mean any vegetation with a DBH of less than 4 inches.

Section 2.0 Bidder's Qualifications

- 2.1 Bids will be accepted only from well-established and qualified licensed contractors, trained and experienced in the clearing of power line rights of way and tree trimming that have been approved by CVE as a Pre-Qualified Contractor. No bid will be considered from any Contractor unless they are known to be skilled and were previously engaged in work of a character and scope consistent with these bid specifications.
- 2.2 Bidders must show that their equipment and facilities are sufficient and their workload so arranged as to meet the schedules called for by the Contract without the use of subcontractors. In order to aid CVE in determining the responsibility of any Bidder, the Bidder shall furnish evidence, satisfactory to CVE, of the Bidder's qualifications, experience and familiarity with work of the character specified and his or her financial ability to properly prosecute the proposed work to completion.
- 2.3 Unless previously approved, each Bidder shall submit to CVE a Contractor's Prequalification Application Form, available at CVE's office, and must be subsequently approved by CVE as a Pre-Qualified Contractor in order to receive a formal Invitation to Bid. CVE will only accept bids from Bidders who have been approved by CVE as a Pre-Qualified Contractor.

Section 3.0 Instruction to Bidders

- 3.1 Bids that are sent by US Postal Service or private carrier shall be clearly marked "BID ENVELOPE ENCLOSED". The bid shall be sealed in a separate envelope and shall have the following information shown on the outside of the envelope:

BID FOR: Power Line Right of Way Clearance and Tree Trimming

BID DUE: TBD

OWNER: Cumberland Valley Electric

BIDDER: _____

Envelope must be addressed and submitted to:

Cumberland Valley Electric

Attn: Supervisor

6219 US Hwy 25E

Gray, KY 40734

Any bid not conforming to these requirements will not be considered.

- 3.2 Before submitting a bid, each Bidder must (a) examine the Contract Documents thoroughly, (b) visit the system to become familiar with local conditions, that may in any manner, affect cost, progress, or performance of the work, (c) have knowledge of all federal, state and local laws, ordinances, rules and regulations affecting performance of

the work, and (d) carefully correlate the Bidder's observations with the requirements of the Contract Documents.

- 3.3 Each bid shall be carefully prepared in accordance with the CVE Specifications referenced in the Contract Documents.
- 3.4 Each bid shall be signed by a representative of the Bidder who is authorized to make contractual obligations for the Bidder and shall give the Bidder's full business address. Bids by partnerships shall be signed with the partnership name followed by the signature and designation of one of the partners and other authorized representative.
- 3.5 Bids by a corporation shall be signed in the name of the corporation, followed by the signature and designation of the president, secretary, or other person authorized to bind the corporation. The name of all persons signing shall also be typed or printed.
- 3.6 Sealed bids will be opened in private the day the bids are due. Contractors will be notified of any awarded work after Board approval.
- 3.7 CVE reserves the right to reject any and all bids, waive any and all technicalities therein, disregard all nonconforming or conditional bids, and evaluate and award bids on other than low bid basis. By submission of a bid, Bidder thereby agrees to these stipulations and will not challenge CVE's decision.
- 3.8 CVE may conduct such investigations as it deems prudent to establish the responsibility, qualifications, and financial ability of the Bidders. CVE's final selection of the best overall bid submitted, as determined solely by CVE, shall be based upon factors such as: financial stability of bidder; personal experience and training; surveys of current and previous employers and previous work history with CVE; overall quality of equipment and organization; ability to adequately serve CVE with full coverage, customer responsiveness and complaint processing; employee safety training, safety compliance and procedures, including drug-free workforce initiatives, etc.
- 3.9 When the Contract is awarded, CVE will provide the successful Bidder written notice of award after its Board of Directors meeting and final approval is obtained.
- 3.10 CVE may elect during the term of this Contract to award one (1) or more additional contracts for rights of way clearance and tree trimming via alternative contractual arrangements such as hourly rates, unit cutting, zone clearing, or lump sum cost for circuit trimming. Nothing contained herein shall be construed as prohibiting CVE from awarding such additional contracts as it deems necessary for the continued safe operation and maintenance of its electric distribution system.

3.11 The term of the agreement will be decided upon and documented in the contract.

Section 4.0 Introduction: Guidelines and Evaluation Methods

In order to maintain line clearance for public safety and electrical reliability, CVE regularly undertakes tree trimming and herbicide activities. These activities are required in order to be compliant with NESC, as well as Kentucky Revised Statue, and guidelines promulgated by OSHA. This guide details the methods and guidelines which CVE uses to accomplish that goal.

Goal:

The goal of our right-of-way clearance program is to maintain line clearance for public safety and electric system reliability.

Strategy:

The strategy for clearing and maintaining line clearance is to arrange the entire system in operable units, defined by individual circuits or substations, and to operate line clearance activities on those units in a regular and scheduled manner.

Tactics:

The tactics involved are detailed in the following Guidelines. At the development stage of CVE's vegetation management plan, circuits were prioritized on the basis of last available date of trimming, and vegetation conditions found by onsite circuit inspections which occur periodically throughout the year as a part of normal activities to determine circuit condition. Reliability, measured by the number of tree related outages expressed on a per circuit mile basis was further used to identify circuits which should be cleared the soonest, with the highest going first and so on. Circuit outages due to trees are regularly reviewed to determine if any adjustment of the trimming cycle to address changing conditions on the circuit is warranted. Onsite inspection further allows adjustment of these time frames should extraordinary circumstances warrant such and adjustment. Examples of such circumstances are: insect infestation damage (Southern Pine Beetle, Emerald Ash Bore, etc.), heavy forest fire damage which will result in tree losses throughout the circuit, or weather related instances.

The effectiveness of the plan is evaluated by the reduction of the frequency of tree related outages, and the duration of tree related outages on the treated circuit. This is monitored by the contribution of tree related outages to both customer and system average interruption indices (SAIDI, SAIFI, and CAIDI). Reports generated by the dispatch Outage Management System (OMS) identify these circuits and the nature and frequency of outages.

CVE conducts clearing activity in each circuit feeder to one full circuit clearing, encompassing floor, side and shade tree trimming (ground to sky 30' wide) each five-year circuit cycle. Circuits and new construction units are then scheduled for chemical treatment and/or right-of-way clearing and/or bush hogging.

Section 5.0 General Requirements

5.1 Bidders bidding on herbicide treatment work shall be trained and licensed in the handling and use of chemicals and sprays, and shall furnish evidence of the same, for foliage, basal, and tree stump applications. Evidence shall include, without being limited to, the Bidder's Commercial Applicator's License Number certified in Category 6- Right of Way from the Kentucky Department of Agriculture.

5.2 A contract crew shall consist of all necessary personnel and all necessary tools and equipment as outlined in the Contractor's Pre-Qualification Application Form, to safely and efficiently complete the work. CVE reserves the right to do any Work covered within the Contract by its own forces, to have such Work performed by other contractors, to cause such Work to be completed by other means, or to defer any Work to a future date.

5.3 *Since Contractor(s) employees come in contact with CVE customers, they shall be completely dressed in suitable clothing which shall be clean at the beginning of each day. All clothing worn by contracting employees must conform to arc flash regulations as require by law if working within the minimum approach distance.*

Each crew shall have a cell phone or some other method of communication that CVE can use to contact them at all times. In the case of cell phones, the phone numbers shall be given to CVE's Supervisor and said phone numbers kept current.

The number and type of personnel and equipment making up each crew shall be agreed upon by the owner. The contractor understands and accepts the fact that the owner reserves the right to terminate the contract for any reason at any time and that there is no guarantee of any specific types or amounts of work.

Identification badges or other forms of identification which display the Company's name, contact information, position, etc. are required and must be shown to the customer upon request.

5.4 All trucks and other vehicles provided by the Contractor to perform the Work shall bear the Contractor's number and shall be well marked and identified with company insignia or name designating the vehicles as property of the Contractor and have "Contractor for Cumberland Valley Electric" magnets in place.

- 5.5 Contractor shall observe all generally recognized safety rules (including without limitation the provisions of the National Electrical Safety Code and ANSI Z133.1-2000 or latest edition thereof), regulations, and methods to prevent injury to all employees and other persons or damage to property of CVE or the public arising from its operations. Contractor shall observe all laws and regulations applicable to its operations including without limitation OSHA requirements, Kentucky Department of Transportation requirements, and Kentucky Department of Agriculture requirements.
- 5.6 Contractor shall secure from CVE information as to the nature of the electric circuits involved in all cases prior to commencement of Work in each area. Contractor acknowledges that CVE's electric circuits are to continue in normal operation during the Work, and Contractor shall provide and use all protective equipment necessary for the protection of its employees and to guard against interfering with the normal operation of these electric circuits. If a line is interrupted or damaged caused by work from this operation the Contractor will be responsible for cost of repairing and restoring that line.
- 5.7 Contractor shall immediately notify CVE of any irregular situations observed on CVE's system, including, without limitation, equipment or facility malfunctions, actual or potential safety problems, loose or sagging guy wires, damaged conductors, leaking transformers, damaged or defective poles, and any other seemingly unusual circumstance encountered by the Contractor.
- 5.8 If, during the term of the Contract, additional hourly crews or workers are needed to perform right of way clearing, tree trimming, chemical applications, CVE will first request such crews or workers from the Contractor then working for CVE. Should the Contractor fail to furnish additional crews or workers upon thirty (30) days written notice, CVE shall have the right to obtain additional crews or workers from other resources.
- 5.9 Contractor shall promote a drug and alcohol free working environment.
- 5.10 Contractor(s) shall not perform or solicit any type of private tree trimming work on customer's property while actively engaged in performing work for CVE under this contract until all work on the circuit is completed.

Section 6.0 Work

- 6.1 Contractor shall perform all Work to the complete satisfaction of CVE and in accordance with all municipal, county, state and other local laws, ordinances, and regulations applicable to Work of this character and nature. All Work performed by the Contractor is subject to inspection and approval by CVE. Any Work not meeting the minimums as set forth in these Specifications, or generally accepted line clearance standards, or Work which has been falsely represented in any fashion by Contractor shall be redone by the Contractor at no (zero) cost to CVE. Failure by CVE to inspect Contractor's Work shall in

no way relieve the Contractor from any obligations, liabilities, or responsibilities in connection with the Contract.

- 6.2 Contractor agrees to provide adequate notice and if possible, obtain consent, for the necessary work from the property owner or public authorities having ownership or control over each tree to be trimmed or removed and/or all property to be cleared or sprayed. Contractor shall discuss with the property owner the type of work to be performed, identifying any and all trees that need to be trimmed or removed, the disposal of brush, any areas that need to be sprayed, and the proposed route of all vehicles and equipment traveling over the owner's property. When property owners cannot be contacted, door hangers shall be left to inform them that Contractor was present to trim trees. Hangers (provided by CVE) shall contain information as Company Name, Phone Number, etc. whenever permission to do any work cannot be obtained, CVE shall be informed of the situation.
- 6.3 Contractor shall certify that complaints of any nature received from property owners or public authorities resulting from this Work will receive immediate attention and that all efforts will be made to effect a prompt adjustment. If any damage is done to the property of others by Contractor's workforce, Contractor shall repair and restore at its sole expense any such property and correct any damage inflicted thereto, all to the complete satisfaction of the owner(s) of the injured property. All complaints, and any action taken by Contractor in connection with such complaints, shall be reported to CVE. If the repairs are not made in a timely manner CVE will make the repairs and invoice the said contractor.
- 6.4 Contractor shall secure all permits and licenses necessary for the Work to be performed and pay all charges and fees required for such permits and licenses.
- 6.5 Contractor(s) shall provide sufficient crews to complete the work in the specified time period. However, CVE expects that after work has begun on specified circuits, the Contractor's operation will progress on a continued basis with necessary staffing levels to complete the required circuit miles by the end of the term of the contract. Crew size, crew structure, crew equipment, and the need for any additional crews under this contract will be at the Contractor's sole discretion. Any work not completed by the specified date must still be completed by the Contractor. The inability to finish the work on time will also be considered and noted before any future bid work is granted to that Contractor.

Section 7.0 Notification/Authorization to Trim or Remove Trees

Cumberland Valley Electric's right-of-way easements allow for the maintenance of right-of-ways areas included within the easements; however, the contractor shall be required to use good judgement and take reasonable care when entering upon such areas. In all cases, respect for the property owner and other stakeholders shall be considered

paramount by the contractor. In sensitive areas such yards, subdivisions, highly maintained areas, posted lands, and similar circumstances, the contractor shall make a good faith effort (when reasonable possible) to inform property owners and/or other stakeholders of the contractor's presence and the general scope of the contractor's work before proceeding. Any situation in which a property owner or complete the work before proceeding. Any situations in which a property owner or other stakeholder takes issue with the contractor's right to enter the property or complete the work shall be reported to CVE's designated representative immediately in order to help facilitate a resolution. All gates, fences and consumer property are to be left in the same condition as found.

CVE provided locks are installed on many locked-gates. The contractor should not cut locks or chains unless permission is granted by the CVE Supervisor. Crews will be provided a CVE key to gain access to areas where a CVE lock is present

- 7.1 The Contractor shall provide the property owner(s) with notification of intent to conduct the required right-of-way clearance and cut stump herbicide application work. This contact shall precede any work done on any property. The work will then be scheduled for each crew. Any line clearance work done without proper notification must have specific approval by the authorized Cumberland Valley representative.
- 7.2 *Verbal notification of the property owner for routine line clearance work is sufficient. If the property owner is not home, a notification card may be left on the door. Notification cards shall only be used where the owner is likely to be present on site on a regular basis. Absentee owners may be notified by mail or by phone.*
- 7.3 In the case of the industrial, municipal, county, state, or large private estate type of properties, the caretakers or other designated individual in the employ of the owners who is responsible for the trees or brush to be cut or trimmed is considered to represent the interest of the owner. Notification of such caretakers or grounds maintenance supervisors is sufficient.
- 7.4 For both bid and hourly crews, the foreman shall contact the designated CVE employees, daily concerning their working locations for their respective crews. Foremen are also to email the information for any members that refuses to allow the crews to properly maintain the ROW. Contractor shall also keep appropriate maps marked to reflect current daily progress for all projects.
- 7.5 If landowner refuses access, Contractor shall notify authorized VE representative immediately.

Section 8.0 Right of Way Clearing/Re-clearing Requirements

- 8.1 Work within the boundaries of this project shall include clearing/re-clearing. The work may be performed on both urban/residential and rural sites where a specified or desired right-of-way shall be established, reestablished and maintained. Trimming shall adhere to ANSI A300 guidelines and OSHA Safety regulations. If the crown of a tree or any branches are within the right-of-way boundaries, even though the base of the tree is outside of the right-of-way boundary, this tree will be considered as part of the Bid Project and shall be removed or trimmed to meet the guidelines (i.e. overhang from a tree outside of right of way).
- 8.2 Techniques consistent with the practices of directional, natural, lateral, and drop crotch trimming should be utilized. Drop crotch pruning consists of reducing tops, sides, or individual limbs and avoids cutting back to small suckers. Directional pruning or trimming shall be used to direct or train future tree growth or sprouting away from the wires. Tree trimming required on coniferous trees (pine, spruce, hemlock, etc.), along the established tree edge shall involve the removal and/or trimming of limbs that are encroaching the right-of-way. Removal of the limbs will be back to the main stem, trunk, and/or to suitable live lateral branch.
- 8.3 Right of way clearing and tree trimming shall be performed on all primary lines. All tree trimming on right-of-way boundaries shall be ground to sky. Tree removals will be concentrated to trees that may pose a threat to primary lines (i.e. danger trees), trees of a fast growing species (i.e. maples, and poplars) and trees requested by landowners to be removed within the ROW. Trees that are outside of the ROW will be trimmed to obtain proper clearance. Contractors are not responsible for tree removals requested by landowners that are outside of the ROW unless such trees are hazard trees. Emphasis shall be placed on removing trees in the 4-12 inch range, where approval is granted by the property owner. Trees larger than 4-12 inch shall be trimmed if reasonable clearance can be obtained to avoid contact with primary lines until the next trim cycle, unless otherwise requested by the landowner.
- 8.4 Where trimming only is permitted, the lateral or Directional pruning method shall be employed. Clearances following our right of way widths for single and three phase lines shall be obtained wherever possible.
- 8.5 As designated by the authorized CVE representative, fruit bearing trees that remain within the right-of-way shall be trimmed not removed in accordance to the Cumberland Valley Electric right-of-way clearing guidelines unless otherwise notified by the property owner.
- 8.6 Existing right of way consisting of primary lines shall be cleared to meet the clearance standards below. If the existing Right-of-Way is in such condition that the clearances below are already achieved, then no work is needed. In the event that the right-of-way

clearance is not sufficient then work will progress in accordance with these specifications. Normal right of way widths are 30 ft. wide for single and three phase lines.

- 8.7 Individual services will not be the responsibility of the Contractor on Circuit bids. CVE circuits include all right-of-way between the CVE owned pole with transformer and the final CVE owned pole. Clearing of secondary services will be the responsibility of the landowner unless a hazardous situation exists that would not allow them to maintain those lines. If such a hazard exists a service man will be dispatched to trim enough to allow swing clearance of the secondary wire. If a landowner requests to remove a tree near a service wire, CVE will temporarily take down the wire while the landowner resolves the removal of the tree in question.
- 8.8 All overhead guy stubs, anchors, and riser poles, shall be cleared of all vines and vegetation to allow reasonable access to that facility for maintenance and serviceability. Generally, this would include the area within 10 ft. of the pole or equipment.
- 8.9 Mechanical Clearing and Re-Clearing work will be permitted where applicable. After any mechanical operation, if any damages to property exist, the Contractor shall restore the land to the natural contour existing prior to the start of the work (i.e. ruts caused by machinery). This must be accomplished to the satisfaction of CVE and the landowner.
- 8.10 All work is to be performed under the supervision of the contractor. Work shall be conducted in a manner such that all phases of the clearing and/or re-clearing work shall progress concurrently, (i.e. cutting, disposal and final cleanup). CVE has the sole authority to designate the class of right-of-way. If any recent right-of-way clearing/re-clearing is encountered, and it does not conform to these specifications, it must be included in the bid.
- 8.11 Disposal of operation wood residue such as brush, wood, large sections of tree trunks, large limbs, wood chips, and other such products produced or generated by this operation on the CVE system shall not obstruct roads, paths, or waterways. Disposal of said residue shall be the sole responsibility of the Contractor and at approved locations. All disposal costs shall be included in the cost submitted on the CVE bid. Logs and brush may be left "wind-rowed" along the outer edges of the right of way.
- 8.12 Disposal of wood from Yards will consist of the cleanup of all brush and large wood will be cut and stacked. The Contractor will not be responsible for the removal of large wood. Cleanup of wood resulting from the removal of a tree will be the responsibility of the landowner. Disposal of wood and brush in Unmaintained Right of Ways will consist of wind rowing the brush and wood to the outer edge of the right of way.

- 8.13 Members requesting Timber of a merchantable size to be left will be cut in lengths of 100 inches unless otherwise specified by the landowner. The timber will be piled on the edge of the right of way and will become the responsibility of the landowner to remove.
- 8.14 Any dead trees or trees deemed to be a hazard even if beyond the right of way, which would strike the line in falling, shall be removed. Contractors are also responsible for any hazardous trees missed upon inspection and will be sent back to remove these hazards. *(Hazard trees may include but not limited to dead or dying trees, trees with visible cankers or rots, severe leaning trees, and trees with severe animal or mechanical damage showing signs of rot).*
- 8.15 Vines on poles, guy wires, and equipment shall be removed and cut off at ground level and the area surrounding the pole and/or equipment.

Section 9.0 Options for Refusals/Reluctance to Yield Right-of-Way

- 9.1 Options to modify right-of-way clearing may be offered to individual landowners or groups of adjacent landowners that object to clearing according to the standards indicated by the CVE right-of-way program. In providing these options, CVE seeks to enable individual members to choose methods for right-of-way clearance that best address their concerns while preventing the burden of costs for use of non-standard procedures from being placed upon CVE members as a whole.

Because of varying site conditions, not all options will be offered in all locations. Options that may be available for a particular site include:

Stumps:

Stump Grinding will not be used on the CVE system unless authorized by a representative of CVE. If any stump grinding is utilized by CVE, the Contractor will be compensated at an hourly rate.

All woody stem vegetation will be cut as close to the ground line as practical and the cuts shall be made parallel with the ground, not at an angle.

Relocation of lines:

Where consistent with CVE standards for line maintenance/improvement, rerouting of lines or moving lines underground at the member's expense will be considered. Rerouting must follow CVE guidelines, and accessibility to the lines must be as good as or better than at the original location. In locations where groups of landowners must agree to rerouting, it is the responsibility of the interested landowners to negotiate agreement with adjacent landowners and obtain necessary easements before rerouting can proceed. If such agreement cannot be obtained within a time frame specified by

CVE, right-of-way clearing will proceed unless other options are negotiated individually with CVE.

Section 10.0 Use of Chemicals and Sprays

- 10.1 The Contractor shall ensure that the on-site applicator be certified by the Kentucky Department of Agriculture, Division of Pesticides. Only certified applicator(s) may apply herbicide on Shelby Energy right-of-way. Copies of applicators licenses shall be given to Cumberland Valley prior to starting any projects.
- 10.2 All herbicides used by the contractor shall be approved by Cumberland Valley and used in accordance with the manufacturer's specifications on the label. Herbicides with a National Fire Protection Association (NFPA) health rating of 3 or greater shall not be used on Cumberland Valley's system unless specifically approved by Cumberland Valley Electric. Contractor shall be responsible for purchasing, storing, and furnishing chemicals to its crews.
- 10.3 There will be no herbicide application on National Forest or other State or Federally owned lands unless authorized with proper permits and authorization from the proper manager of those lands.
- 10.4 *All herbicide treatment crews will have the ability to perform foliar and basal chemical treatment where applicable.*
- 10.5 Treatment Around Poles and Guy Wire Attachments- Cut off all vines ascending all poles and guy wires at the height of reach. Treat with herbicides all vines below cutting and other vegetation, which may interfere with CVE's facilities from all poles and guy wires. Should vines be in contact with CVE conductors or equipment the contractor shall notify the Supervisor to have them safely removed.
- 10.6 Herbicide treatment of right of way may be done at various locations using suitable herbicides to control vegetation particular to that location. Prior to commencement of any Work involving the application of chemicals, the Contractor shall thoroughly familiarize and inform himself of all local conditions and other factors which could or might affect herbicide treatment.
- 10.7 Unless otherwise specified by CVE, the Contractor shall mix and apply the herbicides in accordance with the recommendations of the manufacturer's label and the following general specifications:
 - (a) For Foliage Application: This method shall be used only on brush during the active plant growth period, generally between May 1 and September 1.

Herbicide mixture shall be applied to completely wet the entire leaf, stem and trunk surface of each plant.

(b) For Basal Application: This method shall be used on brush of any size at any season of the year. Herbicide mixture shall be applied to completely wet the entire surface of the stem or trunk from the root-crown up the stem eighteen (18) inches, with emphasis on completely wetting the root-crown.

(c) For Stump Application: This method shall be used on all new stumps at any season of the year. Stumps shall be treated as soon as practical, but always on the same day that the cutting is performed. Herbicide mixture shall be applied in sufficient volume to completely wet the sapwood, the area around the outer edge of stump.

- 10.8 Contractor shall not be obligated to treat any portion of a line where damages to crops, orchards, or ornamental plants may result from chemical drift.
- 10.9 CVE will have the right to specify when and where herbicide application and/or herbicide treatment will be used in rural areas or otherwise.
- 10.10 Contractor's use of herbicides in connection with the Work shall be in strict compliance with all federal and state laws, rules and regulations which from time to time govern the use of herbicides. By undertaking to perform any part of the Work in which chemicals are used, the Contractor certifies that Contractor is familiar with, has complied with, and at all times will comply with all requirements (including but not limited to those relating to training and the giving and posting of all required notices) under all of the foregoing laws, rules and regulations and further, the Contractor shall indemnify and hold harmless CVE and its directors, officers, employees and agents from and against any liability, claim, demand, cause of action of every kind and description, damage, losses and expenses, including attorney's fees through appeals, arising or resulting from the Contractor's non-compliance with or violation of any of the foregoing laws, rules or regulations.
- 10.11 Chemical spills shall be immediately cleaned-up in a manner consistent with label restrictions, Federal and State regulations, and acceptable environmental procedures mandated by law. Any and all notifications to proper authorities in connection with such spills shall be made by the Contractor. Each crew responsible for herbicide applications shall be supplied with a suitable spill response kit for cleaning-up and neutralizing spills of chemicals, all at the sole expense of the Contractor. Contractor shall insure that its employees are trained in the proper techniques for spill response, and are supplied with the necessary personal protective equipment required to perform spill mitigation duties.
- 10.12 Contractor shall at all times be solely responsible for the continuous safeguarding of its workforce, including compliance with all applicable Federal, State, and local laws together with its responsibilities for training its employees in the proper methods and use of personal protective equipment required for handling herbicides used in connection with this Work.

Section 11.0 Safety to Employees and the Public

Contractor shall at all times take all reasonable precautions for the safety of its employees and the public, and shall comply with all applicable provisions of federal, state and local laws, rules and regulations, including but not limited to the most current version of the National Electric Safety Code, all OSHA rules, and the Cumberland Valley Electric safety manual. Contractor shall have a Safety program in place and will produce documentation of Safety training, audits, or other necessary documents upon request.

CVE reserves the right to stop the contractor's work immediately if CVE becomes aware that the contractor is in violation of any of the above mentioned safety requirements, and CVE reserves the right to terminate the contract due to safety concerns at its sole discretions. CVE further reserves the right to inspect contractor work sites at its discretion.

The Contractor is required to furnish CVE with all documentation in a timely manner (when and if requested by CVE) concerning safety requirements, investigations or any other information about the crews working on CVE's system. The contractor must provide a written report to CVE for any OSHA reportable injury or violation, and any "near-miss" incident or accident must be promptly reported to the CVE Supervisor.

- 11.1 The contractor shall obtain full information from CVE as to the voltage of its circuits before starting the various parts of the work.
- 11.2 The Contractor shall at all times conduct the work in a manner as to safeguard the public from injury to persons or property, and shall comply with the regulations set forth in OSHA 1910.269, OSHA 1910.331, OSHA 1910.266 Logging Standard and ANSI Z133.1-1994. All provisions of CVE safety policy, as detailed in the CVE Safety Manual, further apply to all contractors on Cumberland Valley Electric.
- 11.3 The contractor shall use all necessary protection for its employees and to guard against interference with the normal operation of the circuits. If, in the judgment of the Contractor's General Foreman/Supervisor, it is hazardous to trim or remove trees with the circuits energized, the authorized CVE representative(s) shall be contacted. If deemed appropriate, the necessary protection or de-energizing the circuits will be provided by CVE to ensure the safe removal of the affected tree parts.
- 11.4 When applying herbicides, the contractor shall at all times take all reasonable precautions for the safety of employees on the work and of the public by utilizing safety equipment and methods in accordance with the manufacturer's specifications on the herbicide label. Contractor shall comply with all applicable provisions of Federal, State, and local laws specifically including 302 KAR Chapters 27, 28 and 29 relating to the use and application of herbicides. Contractor will furnish copies of any required licenses, certifications or permits to CVE upon request.

Section 12.0 Work Assignments and Equipment

- 12.1 The Contractor shall advise CVE on a daily basis as to the location of all crews, any and all crew movements throughout the day, the progress of the Work assigned, and any problems or unusual occurrences. CVE will furnish systems maps or digital aerial/GPS files to the contract ROW foreman or supervisor for the purpose of locating and recording all work done on CVE's system. After work has been completed in a particular area the paper maps or digital files should be returned to CVE's Supervisor.
- 12.2 Contractor shall make available its crews for emergency work as determined by CVE, day or night, weekends, holidays, or during any natural disasters such as ice or snow storms, tornadoes and other strong storms, etc. Contractor shall furnish an emergency work price list to CVE along with their bid. Contractor shall furnish CVE the name and telephone number of the person to contact for emergency crews. Contractor may be asked to assign additional crews to CVE's system if the emergency is severe or of long duration.
- 12.3 Contractor shall submit to CVE a progress report at the end of each week.
- 12.4 Reasonable working hours shall be utilized for lump sum cost for circuit work. Contractor shall be free to determine working days and hours to suit his needs with the following exceptions. There shall be no work on Saturday or Sunday and on CVE designated holidays without approval by a designated CVE representative. In general, the normal workweek for lump sum work should consist of forty (40) productive hours between 7:00am and 6:00pm, Monday through Friday, unless otherwise approved by CVE. The workday shall begin at the designated assembly location and end at the work site.
- 12.5 CVE properties will not be made available for the Contractor for crew starting points or for storing/garaging tools or equipment, unless authorized by CVE. When convenient, the contractor may be given permission to park vehicles and equipment of CVE property. Contractors may not park at substation property owned by East Kentucky Power (EKP) without written permission from EKP. When parking equipment in the field the contractor is responsible for obtaining permission from the land owners.
- 12.6 CVE shall not be charged for time spent on maintenance of equipment, including without limitation fueling of vehicles, oil or antifreeze changes, changing and/or sharpening of chipper blades, and other similar maintenance and repair work. CVE will not render payment for equipment that is incapable of fully performing its intended function. Minor mechanical repairs such as sharpening and adjusting chain saws shall be permitted on CVE time.
- 12.7 Equipment must be maintained in above average condition and with little or no oil leaks. CVE shall have the right to request that equipment which does not meet the approval of CVE be replaced. The decision of CVE shall be final.

Section 13.0 Supervision of Work and Workmanship

- 13.1 Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over constructions means, methods, techniques, and procedures.
- 13.2 Contractor is an independent contractor and neither Contractor nor any of its employees shall be deemed to be agents or employees of CVE.
- 13.3 The Contractor shall give prior notification of work start-up and when adding or changing crew. Complete the necessary reporting forms as needed. All reports, logs, timesheets, and paperwork shall be accurate, neat, and complete. Exaggerated, padded or incorrect work report entries may result in the dismissal of the crew foreman and/or general foreman/supervisor. The crew foreman and/or supervisor shall maintain an up-to-date log of all property owner notification and/or refusals.
- 13.4 Contractor shall provide and maintain continually on the site of the Work during its progress and until its completion, adequate and competent supervision of all operations for and in connection with the Work being performed under this Contract, either personally or by a duly authorized representative. The General Foreman or other representative of the Contractor, who has charge of the Work thereof, shall be fully authorized to act for the Contractor and to receive whatever orders as may be given for the proper execution of the Work or notices in connection therewith.
- 13.5 Contractor shall employ only workers who are competent to perform the Work assigned to them and who are adequately trained and experienced in performing first-class Work of the character and magnitude required by this Contract and expected of reputable Contractor's performing work similar to the Work necessary under this Contract.
- 13.6 CVE will periodically review and evaluate crew performance based upon factors such as, but not limited to, quality of work, quantity of work, clearances obtained, safety awareness and public relations efforts.
- 13.7 Contractor shall be required to attend regular progress meetings with CVE to discuss the Work of this Contract, review crew evaluations, receive information as to future work locations for planning purposes and discuss any problems in prosecuting the Work under this Contract.
- 13.8 CVE will furnish a designated employee to oversee all aspects of line clearing while contract crews are working on CVE's system. Any and all questions that may arise should be brought before this designated person for resolution. CVE's representative will strive to provide answers to contractor questions and/or requests in a timely manner (usually within two or three business days).

Section 14.0 Contractor Caused Outages

- 14.1 Anytime the Contractor feels that work cannot be completed safely or an outage due to work associated with the clearing of the right of way is unavoidable he should ask for an outage to be scheduled by our line crews. We will have no problem with scheduling an outage to make the job safe.
- 14.2 Should the Contractor knock down or come in contact with CVE's conductors or equipment they must immediately contact the supervisor.
- 14.3 If a Contract Crew causes an outage, that entire crew shall "Stand Down" and will not be permitted to work on the CVE system until the completion of an incident investigation. Upon completion of the investigation, the crew may return to work as determined by CVE and depending on the findings of the investigation. This will allow the contractor and CVE sufficient time to investigate and take any necessary actions to insure future outages will be avoided.

Section 15.0 Payment for Work

- 15.1 The Contractor will be required to utilize daily time sheets provided by or approved by CVE. Timesheets will be accurate, neat and complete, and shall detail time charged to individual work and service orders.
- 15.2 In order to receive payment for any Combination Lump Sum/Unit Price bid work the Contractor must supply with invoices a weekly detailed list of units cleared or trimmed and the location of these units. Inspection for accuracy shall be done by a representative of CVE before payment.
- 15.3 When overtime is applicable, the rate will be 1.5 times the regular hourly rate for labor; however, overtime rates will not be charged for equipment prices. Overtime billed for emergency/storm work will be applicable for hours that exceed 40 hours in a week.

If the owner requests the contractor to bring in extra temporary workers or equipment for emergency situations such as additional work or storm restorations the owner and contractor shall negotiate rates and any special terms/conditions for those extra workers and equipment at the time the request is made. All other terms/conditions applying to temporary workers or equipment at the time the request is made. All other terms/ conditions applying to temporary workers or equipment not changed by mutual agreement of the parties in writing shall be as stated in the contract.

It is understood that by both parties that the hourly rates included in this contract are complete charges and there is no extra charge per man (per Diem) charge.

Section 16.0 Indemnification

To the maximum extent permitted by law, Contractor shall defend, indemnify, and hold harmless Owner and Owner's directors, officers, and employees from all claims, causes of action, losses and liabilities, and expenses (including reasonable attorney's fees) for personal loss, injury, or death to persons (including but not limited to Contractor's

employees) and loss, damage to or destruction of Owner's property or the property of any other person or entity (including but not limited to Contractor's property) in any manner arising out of or connected with the Contract or the materials or equipment supplied or services performed by Contractor, its subcontractors and suppliers of any tier. But nothing herein shall be construed as making Contractor liable for any injury, death, loss, damage, or destruction caused by the sole negligence of Owner.

Section 17.0 Hold Harmless

Contractor agrees to defend, pay on behalf of, and hold harmless CVE and its directors, officer, agents, members and employees, from all claims, demands, causes of action, damages, costs, or liabilities, in law or in equity, of every kind of nature whatsoever, including but not limited to those brought by employees of Contractor or its subcontractors, and those brought as a result of any interruption, discontinuance, or interference with CVE's service to any of its customers, arising out of or as a result of any act or failure to act, whether or not negligent, in connection with the performance of the work to be performed pursuant to this proposal by Contractor its directors, officers, agents, employees, and subcontractors. Contractor agrees to defend and pay all costs in defending these claims, demands, causes of action, damages, costs, or liabilities, including attorney's fees, and Contractor shall also reimburse CVE for any and all legal and other expenses incurred by Cumberland Valley Electric in connection therewith.

Furthermore, Contractor agrees to maintain public liability and property damage insurance (including automobile public liability and property damage insurance) to cover the obligations set forth above. The minimum insurance limits of liability shall be \$500,000.00 automobile public liability and property damage and \$1,000,000.00 for all other public liability and property damage.

The policy must state that Contractor has contractual liability coverage and that CVE has been added as an additional insured. Contractor and any subcontractor shall carry workers' compensation insurance as required by law. CVE shall receive a minimum thirty (30) day notice in the event of cancellation of insurance required by the agreement. Contractor shall furnish a certificate of insurance to CVE showing that the above obligations and requirements are provided for by a qualified insurance carrier, and showing CVE as an additional insured on such insurance annually prior to January 1 of the insured calendar year. It shall be the contractor's responsibility to provide CVE with a new proof prior to the expiration of the current proof.

Section 18.0 Independent Contractor

Contractor hereby acknowledges that it is an independent contractor for Cumberland Valley Electric. Contractor shall be free to determine and control its time, energy and skill to perform the work in accordance with this Agreement.

Contractor acknowledges that CVE, in reliance upon this Agreement, is not withholding any taxes from sums paid to Contractor as compensation for services rendered under this Agreement. Additionally, Contractor acknowledges that CVE is not carrying worker's

compensation coverage or unemployment insurance coverage on Contractor or Contractor's employees due to the independent Contractor nature of the relationship. In the event Contractor should be adjudged not to be an independent Contractor, Contractor will indemnify CVE for any additional expenses resulting from such ruling.