

# KENTUCKY PUBLIC SERVICE COMMISSION

## Electric Distribution Utility Annual Reliability Report

### SECTION 1: CONTACT INFORMATION

UTILITY NAME	Clark Energy Cooperative
REPORT PREPARED BY	Phillip Blythe
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PHONE NUMBER OF PREPARER	859-901-9203

### SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2021
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### SECTION 3: MAJOR EVENT DAYS (MED)

$T_{MED}$	12.3608582
FIRST DATE USED TO DETERMINE $T_{MED}$	1/21/2022
LAST DATE USED TO DETERMINE $T_{MED}$	12/31/2022
NUMBER OF MED IN REPORT YEAR	14

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	<u>27,282</u>	TOTAL CIRCUITS	<u>74</u>
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#### Excluding MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	<u>172.25</u>	SAIDI	<u>220.949</u>
SAIFI	<u>1.51</u>	SAIFI	<u>1.8243</u>

#### Including MED

	5 YEAR AVERAGE		REPORTING YEAR
SAIDI	<u>777.32</u>	SAIDI	<u>2630.7</u>
SAIFI	<u>2.17</u>	SAIFI	<u>3.83</u>

#### 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  $T_{MED}$

# PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BECKNERVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BECKNERVILLE</u>
Substation Location	<u>Combs Ferry Road</u>
Circuit	<u>244 Grimes Mill</u>
Circuit Location	<u>Clark Co - Grimes Mill - Winchester</u>
Total Circuit Length (miles)	<u>13.04</u>
Average Member Count	<u>320</u>
Date of last Trim	<u>2014 - Sectionally trimmed 2020</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>473</b>	<b>2.1625</b>	<b>930</b>	<b>4.8344</b>
<b>Animals</b>	0%	0%	0.05%	0.13%
600 Small Animal/Bird			0.02%	0.06%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other			0.03%	0.06%
<b>Equipment or Installation/Design</b>	5.16%	6.36%	2.95%	3.43%
300 Material or Equipment Fault/Failure	5.16%	6.36%	2.91%	3.36%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.04%	0.06%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	68.51%	61.13%	60.87%	47.90%
400 Decay/Age of Material/Equipment	0.10%	0.29%	2.28%	2.84%
410 Corrosion/Abrasion of Material/Equipm			0.05%	0.06%
420 Tree Growth	0.52%	1.01%	11.37%	10.15%
430 Tree failure from overhang or dead tr	67.74%	58.96%	47.10%	34.45%
440 Trees With Ice/Snow	0.14%	0.87%	0.07%	0.39%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: BECKNERVILLE

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BECKNERVILLE
Substation Location	
Circuit	244 Grimes Mill
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	320
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>473</b>	<b>2.1625</b>	<b>930</b>	<b>4.8344</b>
<b>Maintenance</b>	68.51%	61.13%	60.87%	47.90%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.95%	5.35%	2.71%	8.27%
100 Construction	1.54%	1.73%	1.95%	3.04%
110 Maintenance	0.41%	3.61%	0.74%	5.11%
190 Other Planned			0.02%	0.13%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	13.16%	8.24%	8.21%	5.17%
700 Customer-Caused	1.81%	0.14%	1.06%	0.26%
710 Motor Vehicle	11.35%	8.09%	6.67%	4.46%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.47%	0.45%
<b>Unknown</b>	7.85%	13.44%	5.47%	8.79%
999 Cause Unknown	7.85%	13.44%	5.47%	8.79%
<b>Weather</b>	3.36%	5.49%	19.73%	26.31%
500 Lightning	1.81%	2.02%	3.30%	4.07%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BECKNERVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BECKNERVILLE
Substation Location	
Circuit	244 Grimes Mill
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	320
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	473	2.1625	930	4.8344
<b>Weather</b>	3.36%	5.49%	19.73%	26.31%
510 Wind, Not Trees			0.02%	0.19%
520 Ice, Sleet, Frost, Not Trees	1.55%	3.47%	0.79%	1.55%
530 Flood				
590 Weather, Other			15.63%	20.49%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BLEVINS VALLEY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BLEVINS VALLEY</u>
Substation Location	<u>Bath County - Blevins Valley Road - Preston Ky.</u>
Circuit	<u>124 Hwy 36</u>
Circuit Location	<u>Hwy 36</u>
Total Circuit Length (miles)	<u>41.85</u>
Average Member Count	<u>437</u>
Date of last Trim	<u>2016      Herbicide 2018</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>297</b>	<b>2.0252</b>	<b>1,084</b>	<b>7.0547</b>
<b>Animals</b>	0.42%	1.81%	1.43%	2.74%
600 Small Animal/Bird	0.22%	0.45%	0.64%	1.00%
601 Squirrel	0.20%	1.36%	0.61%	1.45%
610 Large Animal			0.17%	0.26%
611 Cattle Rubbing				
612 Animal/Large Bird			0.01%	0.03%
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.16%	0.23%	1.25%	1.52%
300 Material or Equipment Fault/Failure	0.16%	0.23%	0.94%	0.97%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.29%	0.48%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design			0.03%	0.06%
<b>Maintenance</b>	71.36%	85.54%	87.54%	85.63%
400 Decay/Age of Material/Equipment			0.23%	0.13%
410 Corrosion/Abrasion of Material/Equipm	7.02%	20.34%	1.92%	5.81%
420 Tree Growth	2.08%	4.86%	0.66%	1.55%
430 Tree failure from overhang or dead tr	61.87%	59.89%	84.63%	78.01%
440 Trees With Ice/Snow	0.38%	0.45%	0.10%	0.13%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BLEVINS VALLEY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BLEVINS VALLEY
Substation Location	
Circuit	124 Hwy 36
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	437
Date of last Trim	

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>297</b>	<b>2.0252</b>	<b>1,084</b>	<b>7.0547</b>
<b>Maintenance</b>	71.36%	85.54%	87.54%	85.63%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.24%	6.10%	1.97%	6.75%
100 Construction	0.74%	1.47%	1.42%	4.65%
110 Maintenance	1.50%	4.63%	0.55%	2.10%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0.25%	0.48%
700 Customer-Caused			0.02%	0.03%
710 Motor Vehicle			0.23%	0.45%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.32%	0.34%	0.28%	0.45%
999 Cause Unknown	0.32%	0.34%	0.28%	0.45%
<b>Weather</b>	25.50%	5.99%	7.27%	2.42%
500 Lightning			0.31%	0.71%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: BLEVINS VALLEY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BLEVINS VALLEY</u>
Substation Location	_____
Circuit	<u>124 Hwy 36</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>437</u>
Date of last Trim	_____

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	297	2.0252	1,084	7.0547
<b>Weather</b>	25.50%	5.99%	7.27%	2.42%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	25.50%	5.99%	6.96%	1.71%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: BLEVINS VALLEY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BLEVINS VALLEY</u>
Substation Location	<u>Bath County - Blevins Valley Road - Preston Ky.</u>
Circuit	<u>134 Stulltown</u>
Circuit Location	<u>Stulltown Road</u>
Total Circuit Length (miles)	<u>12.8</u>
Average Member Count	<u>109</u>
Date of last Trim	<u>2016      Herbicide 2018</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>264</b>	<b>1.4404</b>	<b>703</b>	<b>5.5321</b>
<b>Animals</b>	0%	0%	5.31%	7.96%
600 Small Animal/Bird			0.36%	0.50%
601 Squirrel			4.96%	7.46%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	0.69%	0.66%
300 Material or Equipment Fault/Failure			0.69%	0.66%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	82.91%	71.97%	79.09%	61.86%
400 Decay/Age of Material/Equipment				
410 Corrosion/Abrasion of Material/Equipm			7.40%	6.97%
420 Tree Growth				
430 Tree failure from overhang or dead tr	82.46%	70.70%	63.13%	47.76%
440 Trees With Ice/Snow	0.45%	1.27%	8.56%	7.13%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: BLEVINS VALLEY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BLEVINS VALLEY</u>
Substation Location	
Circuit	<u>134 Stulltown</u>
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>109</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>264</b>	<b>1.4404</b>	<b>703</b>	<b>5.5321</b>
<b>Maintenance</b>	82.91%	71.97%	79.09%	61.86%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0%	0%	4.68%	14.59%
100 Construction			3.57%	4.98%
110 Maintenance			1.11%	9.62%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0.25%	0.50%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree			0.25%	0.50%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	15.60%	26.75%	9.37%	13.93%
999 Cause Unknown	15.60%	26.75%	9.37%	13.93%
<b>Weather</b>	1.49%	1.27%	0.61%	0.50%
500 Lightning			0.05%	0.17%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: BLEVINS VALLEY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BLEVINS VALLEY</u>
Substation Location	_____
Circuit	<u>134 Stulltown</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>109</u>
Date of last Trim	_____

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>264</b>	<b>1.4404</b>	<b>703</b>	<b>5.5321</b>
<b>Weather</b>	1.49%	1.27%	0.61%	0.50%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	1.49%	1.27%	0.56%	0.33%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	<u>Powell County - Campton Road - Stanton Ky.</u>
Circuit	<u>114 Natural Bridge</u>
Circuit Location	<u>Hwy 11-15E, Natural Bridge Road</u>
Total Circuit Length (miles)	<u>47.42</u>
Average Member Count	439
Date of last Trim	<u>2015 Herbicide 2019 &amp; 2021</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>749</b>	<b>1.4374</b>	<b>1,677</b>	<b>7.9818</b>
<b>Animals</b>	0.05%	0.48%	0.80%	2.74%
600 Small Animal/Bird	0.05%	0.48%	0.08%	0.20%
601 Squirrel			0.72%	2.48%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird			0.01%	0.06%
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.41%	0.32%	0.93%	1.91%
300 Material or Equipment Fault/Failure	0.38%	0.16%	0.78%	1.28%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.03%	0.16%	0.16%	0.63%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	82.33%	74.33%	80.30%	72.46%
400 Decay/Age of Material/Equipment	0.01%	0.16%	0.46%	1.57%
410 Corrosion/Abrasion of Material/Equipm			0.06%	0.11%
420 Tree Growth	0.41%	2.69%	0.27%	0.68%
430 Tree failure from overhang or dead tr	81.92%	71.47%	79.51%	70.09%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	
Circuit	114 Natural Bridge
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	439
Date of last Trim	

	Totals		5 Year Average	
Total Minutes/Frequency	SAIDI	SAIFI	SAIDI	SAIFI
	749	1.4374	1,677	7.9818
<b>Maintenance</b>	82.33%	74.33%	80.30%	72.46%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0.90%	9.03%	2.19%	7.71%
100 Construction	0.39%	3.80%	1.43%	4.22%
110 Maintenance	0.51%	5.23%	0.75%	3.48%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.02%	0.48%	2.63%	3.03%
700 Customer-Caused				
710 Motor Vehicle			2.03%	1.74%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.02%	0.48%	0.60%	1.28%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.35%	0.48%	1.87%	4.59%
999 Cause Unknown	0.35%	0.48%	1.87%	4.59%
<b>Weather</b>	15.93%	14.90%	11.28%	7.56%
500 Lightning	1.80%	7.29%	2.63%	5.08%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	
Circuit	114 Natural Bridge
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	439
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>749</b>	<b>1.4374</b>	<b>1,677</b>	<b>7.9818</b>
<b>Weather</b>	15.93%	14.90%	11.28%	7.56%
510 Wind, Not Trees	0.15%	0.95%	0.07%	0.17%
520 Ice, Sleet, Frost, Not Trees				
530 Flood	13.98%	6.66%	6.32%	1.34%
590 Weather, Other			2.25%	0.97%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BOWEN</u>
Substation Location	<u>Powell County - Campton Road - Stanton Ky.</u>
Circuit	<u>124 Cow Creek</u>
Circuit Location	<u>Cow Creek Road - Hinkle Contracting</u>
Total Circuit Length (miles)	<u>11.3</u>
Average Member Count	<u>87</u>
Date of last Trim	<u>2015 Herbicide 2019-2021</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>614</b>	<b>3.9080</b>	<b>1,640</b>	<b>11.9080</b>
<b>Animals</b>	0%	0%	0.23%	0.29%
600 Small Animal/Bird				
601 Squirrel			0.23%	0.29%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.35%	0.29%	0.68%	0.39%
300 Material or Equipment Fault/Failure	0.35%	0.29%	0.68%	0.39%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	50.16%	69.71%	70.38%	67.66%
400 Decay/Age of Material/Equipment	1.68%	0.29%	0.63%	0.10%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			1.41%	1.54%
430 Tree failure from overhang or dead tr	42.23%	60.29%	65.72%	62.84%
440 Trees With Ice/Snow	6.25%	9.12%	2.62%	3.19%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>BOWEN</u>
Substation Location	_____
Circuit	<u>124 Cow Creek</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>87</u>
Date of last Trim	_____

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>614</b>	<b>3.9080</b>	<b>1,640</b>	<b>11.9080</b>
<b>Maintenance</b>	50.16%	69.71%	70.38%	67.66%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.73%	2.65%	3.16%	3.47%
100 Construction	0.23%	0.29%	2.33%	2.12%
110 Maintenance	1.50%	2.35%	0.83%	1.35%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.28%	0.29%	0.42%	0.97%
700 Customer-Caused				
710 Motor Vehicle	0.28%	0.29%	0.42%	0.97%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.93%	1.18%	7.33%	18.24%
999 Cause Unknown	0.93%	1.18%	7.33%	18.24%
<b>Weather</b>	46.56%	25.88%	17.80%	8.98%
500 Lightning	3.71%	3.24%	1.66%	1.45%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	
Circuit	124 Cow Creek
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	87
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>614</b>	<b>3.9080</b>	<b>1,640</b>	<b>11.9080</b>
<b>Weather</b>	46.56%	25.88%	17.80%	8.98%
510 Wind, Not Trees			0.11%	0.10%
520 Ice, Sleet, Frost, Not Trees	42.84%	22.65%	16.03%	7.43%
530 Flood				
590 Weather, Other				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	<i>Powell County - Campton Road - Stanton Ky.</i>
Circuit	134 Bowen
Circuit Location	<i>Bowen - Cane Creek</i>
Total Circuit Length (miles)	<i>39.02</i>
Average Member Count	424
Date of last Trim	<i>2015      Herbicide 2019 &amp; 2021</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	250	1.8632	706	5.1840
<b>Animals</b>	0.15%	0.51%	0.76%	2.05%
600 Small Animal/Bird			0.23%	0.86%
601 Squirrel	0.15%	0.51%	0.53%	1.18%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.39%	0.13%	7.20%	5.19%
300 Material or Equipment Fault/Failure	1.39%	0.13%	7.20%	5.19%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	49.07%	45.95%	53.71%	48.95%
400 Decay/Age of Material/Equipment	0.43%	0.51%	0.37%	0.82%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			1.83%	1.82%
430 Tree failure from overhang or dead tr	48.65%	45.44%	45.06%	45.50%
440 Trees With Ice/Snow			6.45%	0.82%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	
Circuit	134 Bowen
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	424
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>250</b>	<b>1.8632</b>	<b>706</b>	<b>5.1840</b>
<b>Maintenance</b>	49.07%	45.95%	53.71%	48.95%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.99%	9.87%	3.57%	8.51%
100 Construction	0.64%	1.27%	1.94%	4.14%
110 Maintenance	2.35%	8.61%	1.63%	4.37%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	2.54%	3.67%	8.06%	7.96%
700 Customer-Caused				
710 Motor Vehicle	0.16%	0.51%	4.24%	3.37%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	2.38%	3.16%	3.82%	4.60%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	1.24%	3.67%	8.62%	8.28%
999 Cause Unknown	1.24%	3.67%	8.62%	8.28%
<b>Weather</b>	42.63%	36.20%	18.08%	19.06%
500 Lightning	18.67%	17.97%	8.22%	10.46%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: BOWEN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	BOWEN
Substation Location	
Circuit	134 Bowen
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	424
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	250	1.8632	706	5.1840
<b>Weather</b>	42.63%	36.20%	18.08%	19.06%
510 Wind, Not Trees			0.11%	0.05%
520 Ice, Sleet, Frost, Not Trees				
530 Flood	23.96%	18.23%	8.49%	6.55%
590 Weather, Other			1.26%	2.00%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CAVE RUN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>CAVE RUN</u>
Substation Location	<u>Rowan County - Hwy 801 - Morehead Ky.</u>
Circuit	<u>124 826-801 Twin Knobs</u>
Circuit Location	<u>Fish Hatchery - Twin Knobs</u>
Total Circuit Length (miles)	<u>20.3</u>
Average Member Count	<u>260</u>
Date of last Trim	<u>2011 Mowing &amp; trimming 2020</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	816	6.1462	1,980	15.2577
<b>Animals</b>	0.25%	0.31%	0.23%	0.40%
600 Small Animal/Bird				
601 Squirrel	0.25%	0.31%	0.23%	0.40%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.23%	0.38%	3.40%	3.08%
300 Material or Equipment Fault/Failure	0.12%	0.13%	1.92%	1.24%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.12%	0.25%	1.48%	1.84%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	51.50%	59.89%	47.74%	47.57%
400 Decay/Age of Material/Equipment	28.56%	16.27%	20.42%	13.28%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			0.15%	0.28%
430 Tree failure from overhang or dead tr	22.93%	43.62%	27.17%	34.01%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: CAVE RUN

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CAVE RUN
Substation Location	
Circuit	124 826-801 Twin Knobs
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	260
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>816</b>	<b>6.1462</b>	<b>1,980</b>	<b>15.2577</b>
<b>Maintenance</b>	51.50%	59.89%	47.74%	47.57%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.78%	6.32%	8.46%	12.60%
100 Construction	0.10%	0.31%	1.19%	2.60%
110 Maintenance	2.68%	6.01%	7.27%	10.01%
190 Other Planned				
<b>Power Supply</b>	44.01%	32.54%	18.13%	13.11%
000 Power Supply	44.01%	32.54%	18.13%	13.11%
<b>Public</b>	0.75%	0.06%	14.30%	14.90%
700 Customer-Caused	0.75%	0.06%	0.31%	0.03%
710 Motor Vehicle			13.99%	14.87%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	7.14%	7.51%
999 Cause Unknown			7.14%	7.51%
<b>Weather</b>	0.48%	0.50%	0.59%	0.83%
500 Lightning	0.48%	0.50%	0.59%	0.83%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: CAVE RUN

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CAVE RUN
Substation Location	
Circuit	124 826-801 Twin Knobs
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	260
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	816	6.1462	1,980	15.2577
<b>Weather</b>	0.48%	0.50%	0.59%	0.83%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CAVE RUN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CAVE RUN
Substation Location	<u>Rowan County - Hwy 801 - Morehead Ky.</u>
Circuit	<u>114 Curry Flats-Airport</u>
Circuit Location	<u>Curry Flatts - Airport</u>
Total Circuit Length (miles)	<u>4.3</u>
Average Member Count	<u>80</u>
Date of last Trim	<u>2011 Mowing + trim 2020</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>464</b>	<b>3.1375</b>	<b>732</b>	<b>3.7875</b>
<b>Animals</b>	0%	0%	2.63%	4.62%
600 Small Animal/Bird			1.13%	2.31%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other			1.51%	2.31%
<b>Equipment or Installation/Design</b>	0%	0%	0.19%	1.32%
300 Material or Equipment Fault/Failure			0.19%	1.32%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	0%	0%	3.17%	6.93%
400 Decay/Age of Material/Equipment			0.30%	0.33%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr			2.87%	6.60%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CAVE RUN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CAVE RUN
Substation Location	
Circuit	114 Curry Flats-Airport
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	80
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>464</b>	<b>3.1375</b>	<b>732</b>	<b>3.7875</b>
<b>Maintenance</b>	0%	0%	3.17%	6.93%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	5.79%	6.77%	4.58%	8.25%
100 Construction	5.79%	6.77%	4.58%	8.25%
110 Maintenance				
190 Other Planned				
<b>Power Supply</b>	80.96%	62.15%	51.31%	51.49%
000 Power Supply	80.96%	62.15%	51.31%	51.49%
<b>Public</b>	13.25%	31.08%	37.56%	26.07%
700 Customer-Caused			29.16%	0.33%
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree	13.25%	31.08%	8.40%	25.74%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0.47%	0.99%
999 Cause Unknown			0.47%	0.99%
<b>Weather</b>	0%	0%	0.10%	0.33%
500 Lightning			0.10%	0.33%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CAVE RUN**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CAVE RUN
Substation Location	
Circuit	114 Curry Flats-Airport
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	80
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	464	3.1375	732	3.7875
<b>Weather</b>	0%	0%	0.10%	0.33%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	Powell County - Shipp's Branch - Clay City
Circuit	114 Hwy 89 Snow Creek
Circuit Location	Hwy 82 - Snow Creek
Total Circuit Length (miles)	28.95
Average Member Count	474
Date of last Trim	2019-2020

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	138	1.0295	634	7.5992
<b>Animals</b>	1.38%	3.07%	1.25%	2.08%
600 Small Animal/Bird	0.92%	2.25%	0.59%	1.03%
601 Squirrel	0.46%	0.82%	0.66%	1.05%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.60%	2.46%	29.03%	16.74%
300 Material or Equipment Fault/Failure	1.60%	2.46%	28.60%	16.21%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.43%	0.53%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	85.48%	81.15%	57.95%	69.29%
400 Decay/Age of Material/Equipment			0.21%	0.25%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.34%	0.20%	0.27%	0.17%
430 Tree failure from overhang or dead tr	85.14%	80.94%	57.47%	68.88%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	
Circuit	114 Hwy 89 Snow Creek
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	474
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>138</b>	<b>1.0295</b>	<b>634</b>	<b>7.5992</b>
<b>Maintenance</b>	85.48%	81.15%	57.95%	69.29%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.34%	3.07%	2.61%	5.02%
100 Construction	0.83%	1.43%	1.49%	1.44%
110 Maintenance	0.51%	1.64%	1.13%	3.58%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	7.41%	3.28%	3.19%	2.89%
700 Customer-Caused				
710 Motor Vehicle	2.51%	1.84%	1.84%	2.22%
720 Aircraft				
730 Fire			0.01%	0.03%
740 Public Cuts Tree	4.90%	1.43%	1.34%	0.64%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	1.50%	4.10%	1.04%	1.00%
999 Cause Unknown	1.50%	4.10%	1.04%	1.00%
<b>Weather</b>	1.30%	2.87%	4.93%	2.97%
500 Lightning	1.30%	2.87%	3.15%	2.44%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	
Circuit	114 Hwy 89 Snow Creek
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	474
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	138	1.0295	634	7.5992
<b>Weather</b>	1.30%	2.87%	4.93%	2.97%
510 Wind, Not Trees			1.51%	0.33%
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			0.27%	0.19%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	Powell County - Shipp's Branch - Clay City
Circuit	134 Black Creek-Beechfork
Circuit Location	Black Creek - Bottoms - Beechfork
Total Circuit Length (miles)	36.43
Average Member Count	708
Date of last Trim	2019-2020

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	123	1.7090	453	4.3319
<b>Animals</b>	2.42%	3.97%	2.59%	5.31%
600 Small Animal/Bird	1.42%	2.56%	1.60%	3.03%
601 Squirrel	1.00%	1.40%	0.99%	2.28%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	53.38%	68.60%	19.86%	34.92%
300 Material or Equipment Fault/Failure	52.68%	67.44%	19.08%	32.83%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.70%	1.16%	0.78%	2.09%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	29.75%	11.07%	60.48%	36.94%
400 Decay/Age of Material/Equipment			0.46%	0.49%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	7.08%	3.31%	2.15%	1.79%
430 Tree failure from overhang or dead tr	22.68%	7.77%	56.98%	33.13%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree			0.03%	0.07%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	
Circuit	134 Black Creek-Beechfork
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	708
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	123	1.7090	453	4.3319
<b>Maintenance</b>	29.75%	11.07%	60.48%	36.94%
490 Maintenance, Other			0.86%	1.47%
<b>Other</b>	0.10%	0.25%	0.03%	0.10%
800 Other	0.10%	0.25%	0.03%	0.10%
801 Supervisor Review				
<b>Planned Outage</b>	3.72%	4.96%	7.97%	14.67%
100 Construction	3.24%	4.05%	5.43%	6.88%
110 Maintenance	0.48%	0.91%	2.54%	7.79%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	4.15%	2.98%	5.36%	1.50%
700 Customer-Caused			4.15%	0.07%
710 Motor Vehicle	4.15%	2.98%	1.13%	1.17%
720 Aircraft				
730 Fire				
740 Public Cuts Tree			0.08%	0.26%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	6.12%	7.77%	3.13%	5.67%
999 Cause Unknown	6.12%	7.77%	3.13%	5.67%
<b>Weather</b>	0.37%	0.41%	0.57%	0.88%
500 Lightning	0.37%	0.41%	0.41%	0.72%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: CLAY CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	CLAY CITY
Substation Location	
Circuit	134 Black Creek-Beechfork
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	708
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	123	1.7090	453	4.3319
<b>Weather</b>	0.37%	0.41%	0.57%	0.88%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			0.16%	0.16%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: FRENCHBURG**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>FRENCHBURG</u>
Substation Location	<u>Meni Fee County - Highway 36 - Frenchburg</u>
Circuit	<u>114 Hwy 460 West</u>
Circuit Location	<u>Downtown Frenchburg - Hwy 460 W</u>
Total Circuit Length (miles)	<u>24.76</u>
Average Member Count	<u>461</u>
Date of last Trim	<u>2019</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	116	1.8134	559	4.4481
<b>Animals</b>	0%	0%	0.20%	0.24%
600 Small Animal/Bird			0.02%	0.05%
601 Squirrel			0.18%	0.19%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	3.28%	2.27%	3.92%	5.40%
300 Material or Equipment Fault/Failure	3.28%	2.27%	3.48%	4.72%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.44%	0.68%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	57.06%	78.71%	62.49%	64.43%
400 Decay/Age of Material/Equipment			0.02%	0.05%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr	56.12%	78.47%	62.21%	64.09%
440 Trees With Ice/Snow	0.94%	0.24%	0.19%	0.10%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree			0.07%	0.19%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: FRENCHBURG**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	FRENCHBURG
Substation Location	
Circuit	114 Hwy 460 West
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	461
Date of last Trim	

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>116</b>	<b>1.8134</b>	<b>559</b>	<b>4.4481</b>
<b>Maintenance</b>	57.06%	78.71%	62.49%	64.43%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0.10%	0.15%
800 Other			0.10%	0.15%
801 Supervisor Review				
<b>Planned Outage</b>	24.53%	15.67%	8.43%	16.89%
100 Construction	15.56%	9.69%	5.00%	8.61%
110 Maintenance	8.97%	5.98%	3.29%	8.08%
190 Other Planned			0.14%	0.19%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	8.43%	0.24%	17.47%	6.91%
700 Customer-Caused	8.29%	0.12%	3.89%	0.19%
710 Motor Vehicle	0.14%	0.12%	13.33%	6.03%
720 Aircraft				
730 Fire				
740 Public Cuts Tree			0.24%	0.68%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.31%	0.48%	0.53%	1.27%
999 Cause Unknown	0.31%	0.48%	0.53%	1.27%
<b>Weather</b>	6.39%	2.63%	6.86%	4.72%
500 Lightning	0.61%	0.24%	0.72%	1.41%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: FRENCHBURG**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	FRENCHBURG
Substation Location	
Circuit	114 Hwy 460 West
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	461
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>116</b>	<b>1.8134</b>	<b>559</b>	<b>4.4481</b>
<b>Weather</b>				
510 Wind, Not Trees	6.39%	2.63%	6.86%	4.72%
520 Ice, Sleet, Frost, Not Trees	5.78%	2.39%	5.98%	3.26%
530 Flood				
590 Weather, Other			0.16%	0.05%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: FRENCHBURG

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	FRENCHBURG
Substation Location	<i>Men-fee County - Hwy 36 - Frenchburg</i>
Circuit	134 Hwy 1274
Circuit Location	<i>Hwy 1274 - Beaver</i>
Total Circuit Length (miles)	<i>68.22</i>
Average Member Count	1,067
Date of last Trim	<i>2021</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	740	5.8060	2,135	16.3296
<b>Animals</b>	0.31%	0.74%	0.61%	1.15%
600 Small Animal/Bird	0.06%	0.13%	0.18%	0.30%
601 Squirrel	0.25%	0.61%	0.43%	0.85%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	4.94%	17.43%	2.49%	7.13%
300 Material or Equipment Fault/Failure	4.94%	17.43%	2.46%	7.10%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.03%	0.03%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design			0.00%	0.01%
<b>Maintenance</b>	84.44%	66.63%	84.11%	72.82%
400 Decay/Age of Material/Equipment	0.04%	0.05%	0.32%	0.36%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.49%	0.50%	9.36%	12.90%
430 Tree failure from overhang or dead tr	61.41%	44.41%	66.64%	51.82%
440 Trees With Ice/Snow	18.79%	5.94%	6.50%	2.11%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree	3.71%	15.74%	1.30%	5.62%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: FRENCHBURG**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	FRENCHBURG
Substation Location	
Circuit	134 Hwy 1274
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	1,067
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>740</b>	<b>5.8060</b>	<b>2,135</b>	<b>16.3296</b>
<b>Maintenance</b>	84.44%	66.63%	84.11%	72.82%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.08%	2.79%	3.33%	6.52%
100 Construction	0.45%	0.63%	1.38%	2.45%
110 Maintenance	0.63%	2.16%	1.95%	4.07%
190 Other Planned			0.00%	0.01%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	2.77%	0.34%	2.11%	0.63%
700 Customer-Caused	2.52%	0.02%	1.60%	0.02%
710 Motor Vehicle	0.14%	0.10%	0.32%	0.34%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.10%	0.23%	0.20%	0.27%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	2.01%	10.54%	2.96%	9.78%
999 Cause Unknown	2.01%	10.54%	2.96%	9.78%
<b>Weather</b>	4.46%	1.52%	4.39%	1.98%
500 Lightning	4.23%	1.47%	2.40%	1.31%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: FRENCHBURG**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	FRENCHBURG
Substation Location	
Circuit	134 Hwy 1274
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	1,067
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>740</b>	<b>5.8060</b>	<b>2,135</b>	<b>16.3296</b>
<b>Weather</b>	4.46%	1.52%	4.39%	1.98%
510 Wind, Not Trees			0.04%	0.14%
520 Ice, Sleet, Frost, Not Trees	0.23%	0.05%	0.08%	0.02%
530 Flood			0.30%	0.24%
590 Weather, Other			1.57%	0.28%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: GRAYSON METER PT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	GRAYSON METER PT
Substation Location	<i>Rowan County - Hwy 801 - Morehead.</i>
Circuit	Grayson Mtr PT
Circuit Location	<i>Waxix Run - Single phase</i>
Total Circuit Length (miles)	<i>2.9</i>
Average Member Count	12
Date of last Trim	<i>2021</i>

	Totals		5 Year Average	
Total Minutes/Frequency	SAIDI	SAIFI	SAIDI	SAIFI
	491	.6667	1,772	11.3846
<b>Animals</b>	0%	0%	0%	0%
600 Small Animal/Bird				
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	0%	0%
300 Material or Equipment Fault/Failure				
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	100%	100%	38.59%	20.95%
400 Decay/Age of Material/Equipment				
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			4.86%	10.14%
430 Tree failure from overhang or dead tr	12.28%	50%	11.27%	8.11%
440 Trees With Ice/Snow	87.72%	50%	22.46%	2.70%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: GRAYSON METER PT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	GRAYSON METER PT
Substation Location	
Circuit	Grayson Mtr PT
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	12
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>491</b>	<b>.6667</b>	<b>1,772</b>	<b>11.3846</b>
<b>Maintenance</b>	100%	100%	38.59%	20.95%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0%	0%	1.84%	2.70%
100 Construction				
110 Maintenance			1.84%	2.70%
190 Other Planned				
<b>Power Supply</b>	0%	0%	50.39%	66.22%
000 Power Supply			50.39%	66.22%
<b>Public</b>	0%	0%	0%	0%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0%	0%
999 Cause Unknown				
<b>Weather</b>	0%	0%	9.18%	10.14%
500 Lightning			9.18%	10.14%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: GRAYSON METER PT

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	GRAYSON METER PT
Substation Location	
Circuit	Grayson Mtr PT
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>12</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	491	.6667	1,772	11.3846
<b>Weather</b>	0%	0%	9.18%	10.14%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	<i>Powell County - Spout Springs Road - Clay City</i>
Circuit	114 Little Hardwicks Crk
Circuit Location	<i>Hardwicks Creek - Little Hardwicks Creek</i>
Total Circuit Length (miles)	<i>35.09</i>
Average Member Count	416
Date of last Trim	<i>2019</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>415</b>	<b>1.6635</b>	<b>626</b>	<b>3.8822</b>
<b>Animals</b>	1.07%	5.49%	1.96%	5.57%
600 Small Animal/Bird			0.52%	0.93%
601 Squirrel	1.07%	5.49%	1.41%	4.58%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird			0.04%	0.06%
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.05%	0.14%	3.22%	5.82%
300 Material or Equipment Fault/Failure	0.05%	0.14%	3.15%	5.57%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.08%	0.25%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	7.44%	13.58%	27.43%	36.04%
400 Decay/Age of Material/Equipment			3.81%	7.99%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			2.10%	1.98%
430 Tree failure from overhang or dead tr	7.44%	13.58%	17.76%	25.33%
440 Trees With Ice/Snow			3.75%	0.74%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	114 Little Hardwicks Crk
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	416
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>415</b>	<b>1.6635</b>	<b>626</b>	<b>3.8822</b>
<b>Maintenance</b>	7.44%	13.58%	27.43%	36.04%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0.07%	0.25%
800 Other			0.07%	0.25%
801 Supervisor Review				
<b>Planned Outage</b>	3.81%	12.86%	5.50%	18.64%
100 Construction	0.28%	1.16%	2.30%	9.29%
110 Maintenance	3.53%	11.71%	3.20%	9.35%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	86.62%	63.01%	57.74%	27.86%
700 Customer-Caused	22.25%	0.43%	14.76%	0.19%
710 Motor Vehicle	64.21%	62.28%	42.68%	27.18%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.16%	0.29%	0.26%	0.37%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.05%	0.12%
<b>Unknown</b>	0.85%	4.19%	1.17%	3.28%
999 Cause Unknown	0.85%	4.19%	1.17%	3.28%
<b>Weather</b>	0.16%	0.72%	2.90%	2.54%
500 Lightning	0.16%	0.72%	1.11%	1.61%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	114 Little Hardwicks Crk
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	416
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	415	1.6635	626	3.8822
<b>Weather</b>	0.16%	0.72%	2.90%	2.54%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			1.78%	0.93%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	<u>Powell County - Spout Springs Road - Clay City</u>
Circuit	124 Hardwicks Crk to PKWY
Circuit Location	<u>2001 to Mt. Parkway - Hardwicks Creek</u>
Total Circuit Length (miles)	<u>4.58</u>
Average Member Count	40
Date of last Trim	<u>2019</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	192	2.6250	285	3.7000
<b>Animals</b>	0%	0%	0%	0%
600 Small Animal/Bird				
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	0%	0%
300 Material or Equipment Fault/Failure				
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	42.88%	44.76%	56.02%	43.24%
400 Decay/Age of Material/Equipment				
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr	42.88%	44.76%	56.02%	43.24%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HARDWICKS CREEK**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	124 Hardwicks Crk to PKWY
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	40
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>192</b>	<b>2.6250</b>	<b>285</b>	<b>3.7000</b>
<b>Maintenance</b>	42.88%	44.76%	56.02%	43.24%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	28.10%	15.24%	24.23%	27.03%
100 Construction	27.04%	10.48%	21.99%	12.16%
110 Maintenance	1.06%	4.76%	2.25%	14.86%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0%	0%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0%	0%
999 Cause Unknown				
<b>Weather</b>	29.02%	40%	19.75%	29.73%
500 Lightning				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	124 Hardwicks Crk to PKWY
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	40
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	192	2.6250	285	3.7000
<b>Weather</b>	29.02%	40%	19.75%	29.73%
510 Wind, Not Trees	29.02%	40%	19.52%	28.38%
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			0.23%	1.35%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	<i>Powell County - Spout Springs Road - Clay City</i>
Circuit	134 Happy Top Rd Hwy 201
Circuit Location	<i>Happy Top to Hwy 82</i>
Total Circuit Length (miles)	<i>12.91</i>
Average Member Count	147
Date of last Trim	<i>2019</i>

	Totals		5 Year Average	
Total Minutes/Frequency	SAIDI	SAIFI	SAIDI	SAIFI
	<b>187</b>	<b>1.1837</b>	<b>580</b>	<b>4.7432</b>
<b>Animals</b>	0%	0%	1.80%	2.71%
600 Small Animal/Bird			1.04%	1.14%
601 Squirrel			0.76%	1.57%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	0.38%	0.28%
300 Material or Equipment Fault/Failure			0.38%	0.28%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	50.60%	90.23%	68.92%	68.23%
400 Decay/Age of Material/Equipment			4.46%	9.12%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	1.66%	4.60%	29.25%	14.53%
430 Tree failure from overhang or dead tr	48.35%	85.06%	35.02%	44.44%
440 Trees With Ice/Snow	0.59%	0.57%	0.19%	0.14%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: **HARDWICKS CREEK**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	134 Happy Top Rd Hwy 201
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	147
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>187</b>	<b>1.1837</b>	<b>580</b>	<b>4.7432</b>
<b>Maintenance</b>	50.60%	90.23%	68.92%	68.23%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.26%	9.20%	1.17%	4.70%
100 Construction	1.49%	2.30%	0.69%	1.85%
110 Maintenance	0.77%	6.90%	0.48%	2.85%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	47.14%	0.57%	15.10%	0.14%
700 Customer-Caused	47.14%	0.57%	15.10%	0.14%
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	8.56%	20.66%
999 Cause Unknown			8.56%	20.66%
<b>Weather</b>	0%	0%	4.07%	3.28%
500 Lightning			2.46%	2.85%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HARDWICKS CREEK

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HARDWICKS CREEK
Substation Location	
Circuit	134 Happy Top Rd Hwy 201
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	147
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	187	1.1837	580	4.7432
<b>Weather</b>	0%	0%	4.07%	3.28%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			1.60%	0.43%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HIGH ROCK**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HIGH ROCK
Substation Location	<i>Powell County - South Fork - Stanton</i>
Circuit	104 Highrock
Circuit Location	<i>Highrock - pilot</i>
Total Circuit Length (miles)	<i>37.1</i>
Average Member Count	152
Date of last Trim	<i>2017 - Herbicide 2019 - 2021</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>559</b>	<b>3.8092</b>	<b>2,383</b>	<b>11.9276</b>
<b>Animals</b>	2.61%	5.53%	0.78%	2.37%
600 Small Animal/Bird			0.02%	0.06%
601 Squirrel	2.61%	5.53%	0.76%	2.32%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	1.70%	1.93%
300 Material or Equipment Fault/Failure			1.55%	1.77%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.16%	0.17%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	89.03%	84.46%	72.32%	72.64%
400 Decay/Age of Material/Equipment			0.15%	0.28%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.13%	0.17%	0.07%	0.17%
430 Tree failure from overhang or dead tr	85.60%	83.25%	57.56%	66.24%
440 Trees With Ice/Snow	3.30%	1.04%	14.47%	5.57%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree			0.07%	0.39%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HIGH ROCK**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HIGH ROCK
Substation Location	
Circuit	104 Highrock
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	152
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>559</b>	<b>3.8092</b>	<b>2,383</b>	<b>11.9276</b>
<b>Maintenance</b>	89.03%	84.46%	72.32%	72.64%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	4.64%	7.43%	2.63%	7.61%
100 Construction	0.27%	0.17%	0.80%	2.26%
110 Maintenance	4.37%	7.25%	1.83%	5.35%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.44%	0.17%	4.17%	3.25%
700 Customer-Caused	0.44%	0.17%	0.10%	0.06%
710 Motor Vehicle			4.07%	3.20%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.60%	0.52%	1.77%	2.59%
999 Cause Unknown	0.60%	0.52%	1.77%	2.59%
<b>Weather</b>	2.68%	1.90%	16.63%	9.60%
500 Lightning	0.74%	1.73%	6.05%	7.12%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HIGH ROCK**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HIGH ROCK
Substation Location	
Circuit	104 Highrock
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	152
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	559	3.8092	2,383	11.9276
<b>Weather</b>				
510 Wind, Not Trees	2.68%	1.90%	16.63%	9.60%
520 Ice, Sleet, Frost, Not Trees	1.93%	0.17%	0.45%	0.06%
530 Flood				
590 Weather, Other			10.13%	2.43%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HINKSTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HINKSTON</u>
Substation Location	<u>Montgomery County - Hinkston Pike - Mt. Sterling</u>
Circuit	<u>214 Langley-Hwy Garage</u>
Circuit Location	<u>Langley Foods -</u>
Total Circuit Length (miles)	<u>1.89</u>
Average Member Count	<u>28</u>
Date of last Trim	<u>2016 Hcrbide 2019</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>81</b>	<b>.3214</b>	<b>368</b>	<b>1.8571</b>
<b>Animals</b>	0%	0%	0%	0%
600 Small Animal/Bird				
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	8.92%	7.69%
300 Material or Equipment Fault/Failure			8.92%	7.69%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	2.44%	11.11%	2.98%	3.85%
400 Decay/Age of Material/Equipment			2.45%	1.92%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr	2.44%	11.11%	0.53%	1.92%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HINKSTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HINKSTON
Substation Location	
Circuit	214 Langley-Hwy Garage
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	28
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>81</b>	<b>.3214</b>	<b>368</b>	<b>1.8571</b>
<b>Maintenance</b>	2.44%	11.11%	2.98%	3.85%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	83.03%	77.78%	23.66%	30.77%
100 Construction	71.11%	55.56%	18.91%	19.23%
110 Maintenance	11.92%	22.22%	4.75%	11.54%
190 Other Planned				
<b>Power Supply</b>	0%	0%	59.11%	50%
000 Power Supply			59.11%	50%
<b>Public</b>	0%	0%	0%	0%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0%	0%
999 Cause Unknown				
<b>Weather</b>	14.53%	11.11%	5.32%	7.69%
500 Lightning	14.53%	11.11%	5.32%	7.69%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HINKSTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HINKSTON
Substation Location	
Circuit	214 Langley-Hwy Garage
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	28
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>81</b>	<b>.3214</b>	<b>368</b>	<b>1.8571</b>
<b>Weather</b>	14.53%	11.11%	5.32%	7.69%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HINKSTON

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HINKSTON
Substation Location	<i>Montgomery County - Hinkston Pike - Mt. Sterling</i>
Circuit	234 Hwy 60-Mtn View
Circuit Location	<i>Stepston - Mt. View</i>
Total Circuit Length (miles)	<i>19.19</i>
Average Member Count	178
Date of last Trim	<i>2017 Herbicide 2019</i>

	Totals		5 Year Average	
Total Minutes/Frequency	SAIDI	SAIFI	SAIDI	SAIFI
	488	2.3034	1,098	7.1629
<b>Animals</b>	0.26%	0.49%	5.17%	5.49%
600 Small Animal/Bird	0.26%	0.49%	5.01%	5.41%
601 Squirrel			0.16%	0.08%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	48.85%	60.24%	33.92%	32.08%
300 Material or Equipment Fault/Failure	48.73%	59.76%	33.87%	31.92%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.12%	0.49%	0.05%	0.16%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	1.45%	3.41%	17.00%	22.43%
400 Decay/Age of Material/Equipment	0.07%	0.24%	3.90%	4.94%
410 Corrosion/Abrasion of Material/Equipm			3.93%	5.80%
420 Tree Growth				
430 Tree failure from overhang or dead tr	1.38%	3.17%	9.17%	11.69%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HINKSTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HINKSTON
Substation Location	
Circuit	234 Hwy 60-Mtn View
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	178
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>488</b>	<b>2.3034</b>	<b>1,098</b>	<b>7.1629</b>
<b>Maintenance</b>	1.45%	3.41%	17.00%	22.43%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.92%	4.88%	2.13%	10.51%
100 Construction	1.31%	3.41%	1.57%	8.31%
110 Maintenance	0.61%	1.46%	0.56%	2.20%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.09%	0.49%	0.14%	0.39%
700 Customer-Caused				
710 Motor Vehicle	0.09%	0.49%	0.05%	0.24%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.09%	0.16%
<b>Unknown</b>	47.19%	29.76%	39.80%	26.67%
999 Cause Unknown	47.19%	29.76%	39.80%	26.67%
<b>Weather</b>	0.23%	0.73%	1.84%	2.43%
500 Lightning	0.23%	0.73%	1.84%	2.43%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: HINKSTON

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HINKSTON
Substation Location	
Circuit	234 Hwy 60-Mtn View
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	178
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	488	2.3034	1,098	7.1629
<b>Weather</b>	0.23%	0.73%	1.84%	2.43%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	<u>Montgomery - Hope - Means Road - Mt. Sterling</u>
Circuit	<u>204 Spencer Rd</u>
Circuit Location	<u>Spencer Road</u>
Total Circuit Length (miles)	<u>12.91</u>
Average Member Count	<u>984</u>
Date of last Trim	<u>2016      Herbicide 2018</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>342</b>	<b>1.4878</b>	<b>876</b>	<b>6.5575</b>
<b>Animals</b>	0.48%	0.82%	0.81%	1.38%
600 Small Animal/Bird	0.09%	0.20%	0.43%	0.87%
601 Squirrel			0.06%	0.14%
610 Large Animal				
611 Cattle Rubbing	0.39%	0.61%	0.32%	0.37%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.18%	2.87%	26.18%	36.22%
300 Material or Equipment Fault/Failure	1.18%	2.87%	24.94%	34.60%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance			0.98%	1.16%
340 Overload			0.25%	0.47%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	6.42%	8.54%	7.26%	11.60%
400 Decay/Age of Material/Equipment	0.17%	0.61%	0.84%	0.62%
410 Corrosion/Abrasion of Material/Equipm	0.03%	0.07%	0.04%	0.06%
420 Tree Growth	0.06%	0.14%	0.19%	0.26%
430 Tree failure from overhang or dead tr	3.39%	5.19%	5.11%	10.08%
440 Trees With Ice/Snow	2.77%	2.53%	1.08%	0.57%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HOPE
Substation Location	
Circuit	204 Spencer Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	984
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>342</b>	<b>1.4878</b>	<b>876</b>	<b>6.5575</b>
<b>Maintenance</b>	6.42%	8.54%	7.26%	11.60%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.51%	8.06%	18.12%	24.53%
100 Construction	2.12%	4.44%	17.23%	20.59%
110 Maintenance	0.38%	3.62%	0.89%	3.94%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	82.12%	71.11%	39.19%	17.64%
700 Customer-Caused			5.74%	0.05%
710 Motor Vehicle	81.44%	69.26%	32.67%	16.21%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.67%	1.84%	0.70%	1.18%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.08%	0.20%
<b>Unknown</b>	1.22%	1.71%	4.84%	5.93%
999 Cause Unknown	1.22%	1.71%	4.84%	5.93%
<b>Weather</b>	6.08%	6.90%	3.61%	2.70%
500 Lightning	1.66%	4.30%	1.72%	2.00%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	
Circuit	<u>204 Spencer Rd</u>
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>984</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>342</b>	<b>1.4878</b>	<b>876</b>	<b>6.5575</b>
<b>Weather</b>	6.08%	6.90%	3.61%	2.70%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	4.42%	2.60%	1.73%	0.59%
530 Flood				
590 Weather, Other			0.16%	0.11%

# PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	<u>Montgomery - Hope Means Road - Mt. Sterling</u>
Circuit	<u>224 Stulltown Rd</u>
Circuit Location	<u>Stulltown Road</u>
Total Circuit Length (miles)	<u>13.44</u>
Average Member Count	<u>138</u>
Date of last Trim	<u>2016 Herbicide 2018+2020</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>74</b>	<b>.9275</b>	<b>318</b>	<b>3.7319</b>
<b>Animals</b>	1.47%	1.56%	0.97%	1.36%
600 Small Animal/Bird	1.47%	1.56%	0.97%	1.36%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.33%	2.34%	9.75%	12.04%
300 Material or Equipment Fault/Failure	1.33%	2.34%	9.75%	12.04%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	33.96%	24.22%	52.44%	33.59%
400 Decay/Age of Material/Equipment			18.91%	13.59%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	7.80%	10.16%	2.40%	2.91%
430 Tree failure from overhang or dead tr	13.07%	13.28%	28.11%	16.89%
440 Trees With Ice/Snow	13.09%	0.78%	3.03%	0.19%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	
Circuit	<u>224 Stulltown Rd</u>
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>138</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>74</b>	<b>.9275</b>	<b>318</b>	<b>3.7319</b>
<b>Maintenance</b>	33.96%	24.22%	52.44%	33.59%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0.19%	0.39%
800 Other			0.19%	0.39%
801 Supervisor Review				
<b>Planned Outage</b>	17.46%	25.78%	13.99%	30.10%
100 Construction	15.33%	10.16%	11.47%	20.39%
110 Maintenance	2.13%	15.63%	2.52%	9.71%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.84%	0.78%	2.06%	2.14%
700 Customer-Caused				
710 Motor Vehicle	0.84%	0.78%	0.19%	0.19%
720 Aircraft				
730 Fire				
740 Public Cuts Tree			1.87%	1.94%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	1.38%	1.36%
999 Cause Unknown			1.38%	1.36%
<b>Weather</b>	44.96%	45.31%	19.23%	19.03%
500 Lightning	44.96%	45.31%	19.23%	19.03%

### PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

#### Substation: HOPE

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HOPE
Substation Location	
Circuit	224 Stulltown Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	138
Date of last Trim	

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>74</b>	<b>.9275</b>	<b>318</b>	<b>3.7319</b>
<b>Weather</b>	44.96%	45.31%	19.23%	19.03%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	<u>Montgomery - Hope-Means Road - Mt. Sterling</u>
Circuit	<u>234 Hope Means Rd</u>
Circuit Location	<u>Hope-Means Road</u>
Total Circuit Length (miles)	<u>31.10</u>
Average Member Count	<u>358</u>
Date of last Trim	<u>2016 Herbicide 2018</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>745</b>	<b>3.3771</b>	<b>1,453</b>	<b>9.1732</b>
<b>Animals</b>	0.03%	0.17%	0.37%	0.70%
600 Small Animal/Bird			0.30%	0.52%
601 Squirrel	0.03%	0.17%	0.07%	0.18%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.60%	1.49%	0.65%	1.40%
300 Material or Equipment Fault/Failure	0.33%	0.66%	0.51%	1.10%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.17%	0.74%	0.09%	0.27%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design	0.10%	0.08%	0.05%	0.03%
<b>Maintenance</b>	38.62%	63.11%	62.39%	71.80%
400 Decay/Age of Material/Equipment	0.06%	0.17%	0.66%	0.85%
410 Corrosion/Abrasion of Material/Equipm			0.04%	0.03%
420 Tree Growth			0.04%	0.09%
430 Tree failure from overhang or dead tr	36.70%	33.75%	60.70%	60.08%
440 Trees With Ice/Snow	1.85%	29.20%	0.95%	10.75%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HOPE
Substation Location	
Circuit	234 Hope Means Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	358
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>745</b>	<b>3.3771</b>	<b>1,453</b>	<b>9.1732</b>
<b>Maintenance</b>	38.62%	63.11%	62.39%	71.80%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	58.91%	33.09%	31.35%	18.09%
100 Construction	0.23%	0.83%	0.82%	3.78%
110 Maintenance	58.68%	32.26%	30.45%	14.28%
190 Other Planned			0.08%	0.03%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	1.31%	1.08%	2.70%	3.01%
700 Customer-Caused			0.03%	0.12%
710 Motor Vehicle	1.31%	1.08%	2.66%	2.89%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0.50%	0.82%
999 Cause Unknown			0.50%	0.82%
<b>Weather</b>	0.54%	1.08%	2.05%	4.17%
500 Lightning	0.42%	0.83%	1.97%	4.02%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HOPE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>HOPE</u>
Substation Location	
Circuit	<u>234 Hope Means Rd</u>
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>358</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>745</b>	<b>3.3771</b>	<b>1,453</b>	<b>9.1732</b>
<b>Weather</b>	0.54%	1.08%	2.05%	4.17%
510 Wind, Not Trees			0.02%	0.06%
520 Ice, Sleet, Frost, Not Trees	0.12%	0.25%	0.06%	0.09%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HUNT
Substation Location	<i>Clark County - Jackson Ferry - Winchester</i>
Circuit	224 Bybee-Elkin Station
Circuit Location	<i>Bybee Road - Elkin Station</i>
Total Circuit Length (miles)	<i>34.76</i>
Average Member Count	262
Date of last Trim	<i>2012 Herbicide 2014</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	305	1.2634	949	5.7510
<b>Animals</b>	0.88%	3.32%	1.40%	3.20%
600 Small Animal/Bird	0.72%	2.72%	0.80%	1.67%
601 Squirrel	0.16%	0.60%	0.57%	1.47%
610 Large Animal				
611 Cattle Rubbing			0.03%	0.07%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.46%	0.60%	4.42%	5.40%
300 Material or Equipment Fault/Failure	1.46%	0.60%	3.95%	5.06%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.47%	0.33%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	62.88%	54.38%	68.21%	61.49%
400 Decay/Age of Material/Equipment	0.49%	0.60%	8.02%	16.06%
410 Corrosion/Abrasion of Material/Equipm	16.19%	12.69%	5.23%	2.80%
420 Tree Growth	24.45%	20.24%	21.42%	9.79%
430 Tree failure from overhang or dead tr	21.75%	20.85%	33.44%	32.64%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree			0.03%	0.07%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HUNT
Substation Location	
Circuit	224 Bybee-Elkin Station
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	262
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>305</b>	<b>1.2634</b>	<b>949</b>	<b>5.7510</b>
<b>Maintenance</b>	62.88%	54.38%	68.21%	61.49%
490 Maintenance, Other			0.07%	0.13%
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	2.96%	8.46%	6.26%	14.26%
100 Construction	2.79%	6.34%	3.16%	3.80%
110 Maintenance	0.17%	2.11%	3.10%	10.46%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	3.29%	2.73%
700 Customer-Caused				
710 Motor Vehicle			3.26%	2.66%
720 Aircraft				
730 Fire				
740 Public Cuts Tree			0.03%	0.07%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	27.34%	28.10%	9.47%	7.13%
999 Cause Unknown	27.34%	28.10%	9.47%	7.13%
<b>Weather</b>	4.48%	5.14%	6.95%	5.80%
500 Lightning	2.50%	3.32%	5.68%	5.26%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	HUNT
Substation Location	
Circuit	224 Bybee-Elkin Station
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	262
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>305</b>	<b>1.2634</b>	<b>949</b>	<b>5.7510</b>
<b>Weather</b>				
510 Wind, Not Trees	4.48%	5.14%	6.95%	5.80%
520 Ice, Sleet, Frost, Not Trees	1.98%	1.81%	0.64%	0.40%
530 Flood				
590 Weather, Other			0.62%	0.13%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: JEFFERSONVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>JEFFERSONVILLE</u>
Substation Location	<u>Montgomery - Hwy 1050 - Mt. Sterling / Jeffersonville</u>
Circuit	<u>234 Pine Hill-Cream Alley</u>
Circuit Location	<u>Willoughbytown - Pine Hill - Cream Alley</u>
Total Circuit Length (miles)	<u>66.99</u>
Average Member Count	<u>951</u>
Date of last Trim	<u>2016 - Herbicide 2020</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>139</b>	<b>1.6393</b>	<b>678</b>	<b>6.4816</b>
<b>Maintenance</b>	38.90%	45.29%	34.99%	37.10%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	10.32%	13.60%	5.06%	10.45%
100 Construction	6.89%	7.38%	3.99%	5.94%
110 Maintenance	3.43%	6.22%	1.08%	4.51%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.72%	0.51%	6.90%	5.92%
700 Customer-Caused				
710 Motor Vehicle	0.32%	0.13%	6.28%	4.69%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.06%	0.13%	0.55%	1.17%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other	0.34%	0.26%	0.07%	0.06%
<b>Unknown</b>	36.27%	37.01%	7.69%	9.77%
999 Cause Unknown	36.27%	37.01%	7.69%	9.77%
<b>Weather</b>	13.07%	2.89%	4.35%	3.33%
500 Lightning	1.51%	1.41%	1.98%	2.95%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: JEFFERSONVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	JEFFERSONVILLE
Substation Location	
Circuit	234 Pine Hill-Cream Alley
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	951
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	139	1.6393	678	6.4816
<b>Weather</b>	13.07%	2.89%	4.35%	3.33%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	11.56%	1.48%	2.36%	0.37%
530 Flood				
590 Weather, Other				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: JEFFERSONVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>JEFFERSONVILLE</u>
Substation Location	<u>Montgomery - Hwy1050 - Mt. Sterling / Jeffersonville</u>
Circuit	<u>244 Means</u>
Circuit Location	<u>Hwy 1050 - Means</u>
Total Circuit Length (miles)	<u>46.54</u>
Average Member Count	<u>583</u>
Date of last Trim	<u>2016      Herbicide 2020</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	162	1.0343	420	3.5928
<b>Animals</b>	0.15%	0.33%	0.47%	0.91%
600 Small Animal/Bird	0.05%	0.17%	0.37%	0.72%
601 Squirrel	0.09%	0.17%	0.11%	0.19%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.69%	1.16%	2.02%	3.44%
300 Material or Equipment Fault/Failure	0.55%	0.66%	1.95%	3.20%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.14%	0.50%	0.08%	0.24%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	43.04%	52.74%	56.33%	61.98%
400 Decay/Age of Material/Equipment			12.51%	27.02%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.24%	0.33%	0.31%	0.53%
430 Tree failure from overhang or dead tr	42.49%	51.91%	37.55%	31.23%
440 Trees With Ice/Snow	0.31%	0.50%	0.12%	0.14%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: JEFFERSONVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>JEFFERSONVILLE</u>
Substation Location	_____
Circuit	<u>244 Means</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>583</u>
Date of last Trim	_____

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>162</b>	<b>1.0343</b>	<b>420</b>	<b>3.5928</b>
<b>Maintenance</b>	43.04%	52.74%	56.33%	61.98%
490 Maintenance, Other			5.84%	3.06%
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	6.16%	14.59%	8.23%	22.14%
100 Construction	5.16%	6.14%	4.87%	9.04%
110 Maintenance	1.00%	8.46%	3.36%	13.10%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	12.44%	1.33%	16.70%	0.57%
700 Customer-Caused	11.76%	0.17%	16.41%	0.19%
710 Motor Vehicle			0.02%	0.05%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.69%	1.16%	0.27%	0.33%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	19.75%	14.76%	8.84%	5.69%
999 Cause Unknown	19.75%	14.76%	8.84%	5.69%
<b>Weather</b>	17.77%	15.09%	7.40%	5.26%
500 Lightning	1.89%	1.99%	1.19%	1.34%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: JEFFERSONVILLE**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	JEFFERSONVILLE
Substation Location	
Circuit	244 Means
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	583
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>162</b>	<b>1.0343</b>	<b>420</b>	<b>3.5928</b>
<b>Weather</b>	17.77%	15.09%	7.40%	5.26%
510 Wind, Not Trees			0.08%	0.14%
520 Ice, Sleet, Frost, Not Trees	14.10%	10.12%	5.45%	2.92%
530 Flood	1.79%	2.99%	0.69%	0.86%
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	<u>Menifee County - Kendrick Ridge - Frenchburg</u>
Circuit	<u>104 Denniston</u>
Circuit Location	<u>Denniston</u>
Total Circuit Length (miles)	<u>84.37</u>
Average Member Count	<u>960</u>
Date of last Trim	<u>2013      Herbicide 2019</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	180	2.4979	865	10.5819
<b>Animals</b>	0.99%	0.96%	0.64%	0.72%
600 Small Animal/Bird	0.25%	0.17%	0.24%	0.33%
601 Squirrel	0.72%	0.75%	0.40%	0.38%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird	0.02%	0.04%	0.00%	0.01%
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	23.79%	30.98%	6.50%	8.60%
300 Material or Equipment Fault/Failure	23.79%	30.98%	6.49%	8.59%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design			0.01%	0.01%
<b>Maintenance</b>	55.89%	60.34%	71.33%	65.97%
400 Decay/Age of Material/Equipment	0.07%	0.04%	1.64%	9.92%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.08%	0.08%	0.80%	0.76%
430 Tree failure from overhang or dead tr	55.61%	60.18%	68.86%	55.27%
440 Trees With Ice/Snow	0.14%	0.04%	0.04%	0.02%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	
Circuit	104 Denniston
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	960
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>180</b>	<b>2.4979</b>	<b>865</b>	<b>10.5819</b>
<b>Maintenance</b>	55.89%	60.34%	71.33%	65.97%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0.01%	0.01%
800 Other			0.01%	0.01%
801 Supervisor Review				
<b>Planned Outage</b>	2.46%	5.17%	1.73%	3.79%
100 Construction	1.52%	1.46%	1.15%	1.53%
110 Maintenance	0.93%	3.71%	0.57%	2.27%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	11.61%	0.04%	12.30%	8.39%
700 Customer-Caused	11.61%	0.04%	2.41%	0.01%
710 Motor Vehicle			9.10%	7.39%
720 Aircraft				
730 Fire				
740 Public Cuts Tree			0.43%	0.53%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.36%	0.45%
<b>Unknown</b>	1.50%	1.38%	3.11%	10.10%
999 Cause Unknown	1.50%	1.38%	3.11%	10.10%
<b>Weather</b>	3.77%	1.13%	4.37%	2.41%
500 Lightning	0.86%	0.79%	1.38%	1.02%

**PSC Report**

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MARIBA</u>
Substation Location	_____
Circuit	<u>104 Denniston</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>960</u>
Date of last Trim	_____

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>180</b>	<b>2.4979</b>	<b>865</b>	<b>10.5819</b>
<b>Weather</b>	3.77%	1.13%	4.37%	2.41%
510 Wind, Not Trees			0.55%	0.77%
520 Ice, Sleet, Frost, Not Trees	2.91%	0.33%	0.60%	0.08%
530 Flood				
590 Weather, Other			1.83%	0.54%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	<u>Manitowish County - Kendrick Ridge - Frenchburg</u>
Circuit	<u>114 Tarr Ridge</u>
Circuit Location	<u>Tarr Ridge Road</u>
Total Circuit Length (miles)	<u>24.93</u>
Average Member Count	<u>263</u>
Date of last Trim	<u>2013                      Herbicide 2019</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	80	.7414	167	1.7224
<b>Animals</b>	9.67%	7.69%	7.15%	7.06%
600 Small Animal/Bird	1.60%	3.08%	1.75%	2.87%
601 Squirrel	8.07%	4.62%	5.40%	4.19%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	35.27%	54.36%	20.86%	27.81%
300 Material or Equipment Fault/Failure	35.27%	54.36%	20.86%	27.81%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	10.65%	4.62%	36.14%	19.43%
400 Decay/Age of Material/Equipment			0.71%	0.66%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			0.14%	0.22%
430 Tree failure from overhang or dead tr	10.65%	4.62%	24.43%	17.00%
440 Trees With Ice/Snow			10.86%	1.55%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	
Circuit	114 Tarr Ridge
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	263
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>80</b>	<b>.7414</b>	<b>167</b>	<b>1.7224</b>
<b>Maintenance</b>	10.65%	4.62%	36.14%	19.43%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0.40%	4.62%	7.10%	25.61%
100 Construction			1.38%	1.77%
110 Maintenance	0.40%	4.62%	5.72%	23.84%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0.38%	0.44%
700 Customer-Caused				
710 Motor Vehicle			0.33%	0.22%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.05%	0.22%
<b>Unknown</b>	4.14%	3.08%	2.90%	2.21%
999 Cause Unknown	4.14%	3.08%	2.90%	2.21%
<b>Weather</b>	39.88%	25.64%	25.47%	17.44%
500 Lightning	23.86%	25.13%	16.62%	16.78%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	
Circuit	114 Tarr Ridge
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	263
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>80</b>	<b>.7414</b>	<b>167</b>	<b>1.7224</b>
<b>Weather</b>	39.88%	25.64%	25.47%	17.44%
510 Wind, Not Trees	16.02%	0.51%	7.69%	0.22%
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			1.15%	0.44%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MARIBA
Substation Location	<u>ManiFec County - Kendrick Ridge - Frenchburg</u>
Circuit	134 Kendrick Ridge-Single
Circuit Location	<u>Kendrick Ridge</u>
Total Circuit Length (miles)	10.54
Average Member Count	111
Date of last Trim	<u>2013                      Herbicide 2019</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	157	1.2973	494	4.2703
<b>Animals</b>	0%	0%	4.66%	7.17%
600 Small Animal/Bird			1.04%	1.27%
601 Squirrel			3.62%	5.91%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.85%	1.39%	1.42%	2.11%
300 Material or Equipment Fault/Failure	0.85%	1.39%	0.62%	0.84%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.80%	1.27%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	83.75%	78.47%	74.67%	57.81%
400 Decay/Age of Material/Equipment				
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr	83.75%	78.47%	74.67%	57.81%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MARIBA</u>
Substation Location	
Circuit	<u>134 Kendrick Ridge-Single</u>
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	<u>111</u>
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>157</b>	<b>1.2973</b>	<b>494</b>	<b>4.2703</b>
<b>Maintenance</b>	83.75%	78.47%	74.67%	57.81%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.78%	11.11%	6.29%	24.26%
100 Construction	1.20%	1.39%	5.46%	15.40%
110 Maintenance	0.59%	9.72%	0.83%	8.86%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0%	0%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.32%	0.69%	0.42%	0.84%
999 Cause Unknown	0.32%	0.69%	0.42%	0.84%
<b>Weather</b>	13.30%	8.33%	12.54%	7.81%
500 Lightning	0.55%	1.39%	8.49%	5.70%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MARIBA**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MARIBA</u>
Substation Location	_____
Circuit	<u>134 Kendrick Ridge-Single</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>111</u>
Date of last Trim	_____

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>157</b>	<b>1.2973</b>	<b>494</b>	<b>4.2703</b>
<b>Weather</b>	13.30%	8.33%	12.54%	7.81%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	12.75%	6.94%	4.05%	2.11%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MILLER HUNT</u>
Substation Location	<u>Clark County - Miller Hunt Road - Winchester</u>
Circuit	<u>224 Miller Hunt Rd</u>
Circuit Location	<u>Miller Hunt Road</u>
Total Circuit Length (miles)	<u>36.48</u>
Average Member Count	<u>334</u>
Date of last Trim	<u>2015 Herbicide 2017</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	122	2.0240	361	4.7958
<b>Animals</b>	3.86%	2.51%	4.67%	4.57%
600 Small Animal/Bird	3.60%	2.37%	3.91%	4.01%
601 Squirrel			0.67%	0.50%
610 Large Animal				
611 Cattle Rubbing	0.26%	0.15%	0.09%	0.06%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.68%	0.30%	17.43%	10.33%
300 Material or Equipment Fault/Failure	0.68%	0.30%	11.58%	6.14%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance			5.84%	4.07%
340 Overload			0.01%	0.13%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	8.86%	3.55%	20.19%	11.58%
400 Decay/Age of Material/Equipment			0.38%	0.25%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			6.84%	4.20%
430 Tree failure from overhang or dead tr	8.36%	3.11%	12.79%	6.95%
440 Trees With Ice/Snow	0.49%	0.44%	0.17%	0.19%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	
Circuit	224 Miller Hunt Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	334
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>122</b>	<b>2.0240</b>	<b>361</b>	<b>4.7958</b>
<b>Maintenance</b>	8.86%	3.55%	20.19%	11.58%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	5.70%	4.29%	7.16%	9.52%
100 Construction	4.48%	2.96%	5.16%	5.51%
110 Maintenance	1.22%	1.33%	1.97%	3.94%
190 Other Planned			0.03%	0.06%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	14.72%	19.72%
700 Customer-Caused			0.10%	0.06%
710 Motor Vehicle			14.62%	19.66%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	1.63%	1.31%
999 Cause Unknown			1.63%	1.31%
<b>Weather</b>	80.91%	89.35%	34.20%	42.96%
500 Lightning	9.16%	2.37%	9.93%	6.14%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	
Circuit	224 Miller Hunt Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	334
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	122	2.0240	361	4.7958
<b>Weather</b>	80.91%	89.35%	34.20%	42.96%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	71.75%	86.98%	24.27%	36.82%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MILLER HUNT</u>
Substation Location	<u>Clark County - Miller Hunt - Winchester</u>
Circuit	<u>234 Office</u>
Circuit Location	<u>Office Feed - Hwy 15 - Hwy 89</u>
Total Circuit Length (miles)	<u>9.63</u>
Average Member Count	<u>117</u>
Date of last Trim	<u>2015</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	70	1.2051	454	3.3761
<b>Animals</b>	2.09%	3.55%	1.08%	3.04%
600 Small Animal/Bird			0.27%	0.76%
601 Squirrel	2.09%	3.55%	0.82%	2.28%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.42%	0.71%	0.35%	0.51%
300 Material or Equipment Fault/Failure	0.42%	0.71%	0.35%	0.51%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	15.45%	9.93%	26.53%	15.70%
400 Decay/Age of Material/Equipment	1.09%	0.71%	0.17%	0.25%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth				
430 Tree failure from overhang or dead tr	14.36%	9.22%	26.36%	15.44%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	
Circuit	234 Office
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	117
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	70	1.2051	454	3.3761
<b>Maintenance</b>	15.45%	9.93%	26.53%	15.70%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	58.62%	80.85%	12.46%	36.46%
100 Construction	10.42%	7.09%	4.49%	8.61%
110 Maintenance	48.20%	73.76%	7.96%	27.85%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	24.27%	0.25%
700 Customer-Caused			24.27%	0.25%
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0.15%	1.01%
999 Cause Unknown			0.15%	1.01%
<b>Weather</b>	23.43%	4.96%	35.17%	43.04%
500 Lightning	23.43%	4.96%	35.17%	43.04%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: MILLER HUNT

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MILLER HUNT</u>
Substation Location	_____
Circuit	<u>234 Office</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>117</u>
Date of last Trim	_____

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	70	1.2051	454	3.3761
<b>Weather</b>	23.43%	4.96%	35.17%	43.04%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: MILLER HUNT

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	<i>Clark County - Miller Hunt - Winchester</i>
Circuit	244 Hwy 89
Circuit Location	<i>Hwy 89</i>
Total Circuit Length (miles)	<i>22.6</i>
Average Member Count	246
Date of last Trim	<i>2015</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	337	2.2439	619	4.4715
<b>Animals</b>	0.06%	0.18%	0.55%	0.64%
600 Small Animal/Bird	0.06%	0.18%	0.41%	0.55%
601 Squirrel			0.13%	0.09%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	5.51%	5%
300 Material or Equipment Fault/Failure			5.51%	5%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	0%	0%	3.06%	4.82%
400 Decay/Age of Material/Equipment			0.89%	1.27%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			0.09%	0.18%
430 Tree failure from overhang or dead tr			2.08%	3.36%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: MILLER HUNT**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	
Circuit	244 Hwy 89
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	246
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>337</b>	<b>2.2439</b>	<b>619</b>	<b>4.4715</b>
<b>Maintenance</b>	0%	0%	3.06%	4.82%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0.60%	1.99%	4.37%	8.91%
100 Construction	0.38%	1.09%	3.85%	6.27%
110 Maintenance	0.22%	0.91%	0.52%	2.64%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	4.21%	5.80%	28.49%	22.55%
700 Customer-Caused			1.18%	0.09%
710 Motor Vehicle			24.54%	17.82%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	4.21%	5.80%	2.32%	3.00%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.45%	1.64%
<b>Unknown</b>	0%	0%	3.74%	5.45%
999 Cause Unknown			3.74%	5.45%
<b>Weather</b>	95.13%	92.03%	54.28%	52.64%
500 Lightning	46.94%	47.64%	26.70%	26.27%

### PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

#### Substation: MILLER HUNT

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MILLER HUNT
Substation Location	
Circuit	244 Hwy 89
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	246
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	337	2.2439	619	4.4715
<b>Weather</b>	95.13%	92.03%	54.28%	52.64%
510 Wind, Not Trees			1.36%	4.09%
520 Ice, Sleet, Frost, Not Trees	48.19%	44.38%	26.22%	22.27%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: MT. STERLING

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>MT. STERLING</u>
Substation Location	<u>MT. Sterling - Levee Road - Mt. Sterling</u>
Circuit	<u>134 Levee-Hwy 11</u>
Circuit Location	<u>Levee - Hwy - 11</u>
Total Circuit Length (miles)	<u>59.96</u>
Average Member Count	<u>682</u>
Date of last Trim	<u>2015</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	194	.9736	627	3.9897
<b>Animals</b>	6.01%	11.45%	2.38%	3.75%
600 Small Animal/Bird	5.67%	10.69%	2.15%	3.45%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing	0.29%	0.60%	0.09%	0.15%
612 Animal/Large Bird			0.12%	0.11%
620 Animal damage-gnawing or boring				
690 Animal, Other	0.05%	0.15%	0.01%	0.04%
<b>Equipment or Installation/Design</b>	5.62%	12.65%	5.05%	7.39%
300 Material or Equipment Fault/Failure	5.62%	12.65%	4.70%	7.17%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.34%	0.22%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	36.62%	28.46%	34.58%	27.45%
400 Decay/Age of Material/Equipment	0.55%	0.30%	1.97%	3.20%
410 Corrosion/Abrasion of Material/Equipm			7.04%	4.34%
420 Tree Growth	3.35%	3.46%	2.65%	2.72%
430 Tree failure from overhang or dead tr	32.41%	24.25%	22.81%	17.05%
440 Trees With Ice/Snow	0.31%	0.45%	0.10%	0.11%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree			0.02%	0.04%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: MT. STERLING

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MT. STERLING
Substation Location	
Circuit	134 Levee-Hwy 11
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	682
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>194</b>	<b>.9736</b>	<b>627</b>	<b>3.9897</b>
<b>Maintenance</b>	36.62%	28.46%	34.58%	27.45%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	3.52%	8.89%	26.01%	31.13%
100 Construction	3.25%	7.53%	25.41%	29.00%
110 Maintenance	0.27%	1.36%	0.59%	2.13%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	10.95%	4.22%	5.54%	2.72%
700 Customer-Caused	8.70%	0.30%	2.85%	0.29%
710 Motor Vehicle	1.25%	2.41%	1.75%	1.36%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	1.00%	1.51%	0.94%	1.07%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.56%	1.96%	4.84%	7.79%
999 Cause Unknown	0.56%	1.96%	4.84%	7.79%
<b>Weather</b>	36.73%	32.38%	21.61%	19.77%
500 Lightning	6.79%	9.49%	11.75%	13.27%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: MT. STERLING

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	MT. STERLING
Substation Location	
Circuit	134 Levee-Hwy 11
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	682
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	194	.9736	627	3.9897
<b>Weather</b>				
510 Wind, Not Trees	36.73%	32.38%	21.61%	19.77%
520 Ice, Sleet, Frost, Not Trees	0.02%	0.15%	0.60%	0.96%
530 Flood				
590 Weather, Other	29.92%	22.74%	9.26%	5.55%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: REID VILLAGE

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	REID VILLAGE
Substation Location	<i>Montgomery - Hwy 60 - Mt. Sterling</i>
Circuit	124 Prewitt Pike
Circuit Location	<i>Reid Village - Prewitt Pike</i>
Total Circuit Length (miles)	<i>134</i>
Average Member Count	394
Date of last Trim	<i>2015</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>95</b>	<b>.8807</b>	<b>234</b>	<b>2.0558</b>
<b>Animals</b>	3.23%	4.03%	8.28%	10.62%
600 Small Animal/Bird			1.06%	1.36%
601 Squirrel	3.23%	4.03%	7.22%	9.26%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	18.50%	23.63%	22.80%	17.53%
300 Material or Equipment Fault/Failure	18.50%	23.63%	22.31%	17.04%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.50%	0.49%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	65.12%	53.31%	53.00%	37.28%
400 Decay/Age of Material/Equipment			1.11%	2.10%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			1.11%	2.10%
430 Tree failure from overhang or dead tr	57.59%	46.69%	48.84%	32.35%
440 Trees With Ice/Snow	7.53%	6.63%	3.05%	2.84%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: REID VILLAGE

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	REID VILLAGE
Substation Location	
Circuit	124 Prewitt Pike
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	394
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>95</b>	<b>.8807</b>	<b>234</b>	<b>2.0558</b>
<b>Maintenance</b>	65.12%	53.31%	53.00%	37.28%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	10.48%	16.71%	12.13%	30.99%
100 Construction	3.76%	9.51%	3.23%	10.62%
110 Maintenance	6.72%	7.20%	8.90%	20.37%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	2.03%	1.44%	2.80%	1.60%
700 Customer-Caused	1.40%	0.58%	0.80%	0.49%
710 Motor Vehicle	0.64%	0.86%	2.01%	1.11%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0%	0%	0.55%	0.99%
999 Cause Unknown			0.55%	0.99%
<b>Weather</b>	0.64%	0.86%	0.43%	0.99%
500 Lightning	0.64%	0.86%	0.43%	0.99%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: REID VILLAGE

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	REID VILLAGE
Substation Location	
Circuit	124 Prewitt Pike
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	394
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	95	.8807	234	2.0558
<b>Weather</b>	0.64%	0.86%	0.43%	0.99%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: SIDEVIEW**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	SIDEVIEW
Substation Location	<i>Clark County - Chiles Hwy - Winchester</i>
Circuit	144 Pretty Run-Hwy 627
Circuit Location	<i>Big Stoner - Pretty Run</i>
Total Circuit Length (miles)	<i>82.79</i>
Average Member Count	494
Date of last Trim	<i>2013</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	270	2.1437	991	10.0040
<b>Animals</b>	1.98%	3.12%	7.47%	4.97%
600 Small Animal/Bird	1.79%	2.93%	2.17%	2.69%
601 Squirrel	0.19%	0.19%	0.76%	1.25%
610 Large Animal			0.03%	0.02%
611 Cattle Rubbing			0.03%	0.04%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other			4.48%	0.97%
<b>Equipment or Installation/Design</b>	5.45%	4.53%	15.78%	15.61%
300 Material or Equipment Fault/Failure	5.15%	4.06%	15.11%	14.96%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance			0.02%	0.02%
340 Overload	0.30%	0.47%	0.65%	0.63%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	55.34%	57.79%	30.76%	21.45%
400 Decay/Age of Material/Equipment	26.71%	45.42%	10.26%	12.28%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.76%	1.13%	1.21%	1.09%
430 Tree failure from overhang or dead tr	27.86%	11.24%	19.29%	8.08%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: SIDEVIEW

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	SIDEVIEW
Substation Location	
Circuit	144 Pretty Run-Hwy 627
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	494
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>270</b>	<b>2.1437</b>	<b>991</b>	<b>10.0040</b>
<b>Maintenance</b>	55.34%	57.79%	30.76%	21.45%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	30.86%	26.91%	15.51%	19.65%
100 Construction	30.09%	23.51%	11.75%	8.14%
110 Maintenance	0.77%	3.40%	3.76%	11.51%
190 Other Planned				
<b>Power Supply</b>	0%	0%	2.88%	10.42%
000 Power Supply			2.88%	10.42%
<b>Public</b>	1.35%	2.83%	14.73%	11.11%
700 Customer-Caused				
710 Motor Vehicle	1.08%	2.17%	14.61%	10.95%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.27%	0.66%	0.11%	0.16%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	2.29%	3.02%	8.32%	14.20%
999 Cause Unknown	2.29%	3.02%	8.32%	14.20%
<b>Weather</b>	2.73%	1.79%	4.55%	2.61%
500 Lightning	2.73%	1.79%	4.22%	2.54%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: SIDEVIEW**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>SIDEVIEW</u>
Substation Location	_____
Circuit	<u>144 Pretty Run-Hwy 627</u>
Circuit Location	_____
Total Circuit Length (miles)	_____
Average Member Count	<u>494</u>
Date of last Trim	_____

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>270</b>	<b>2.1437</b>	<b>991</b>	<b>10.0040</b>
<b>Weather</b>				
510 Wind, Not Trees	2.73%	1.79%	4.55%	2.61%
520 Ice, Sleet, Frost, Not Trees			0.04%	0.04%
530 Flood				
590 Weather, Other			0.28%	0.02%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: SIDEVIEW

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>SIDEVIEW</u>
Substation Location	<u>Clark County - Charles Hwy - Winchester</u>
Circuit	<u>224 Judy</u>
Circuit Location	<u>Judy - Van Thompson</u>
Total Circuit Length (miles)	<u>43.93</u>
Average Member Count	<u>369</u>
Date of last Trim	<u>2014</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>470</b>	<b>1.9214</b>	<b>475</b>	<b>2.2772</b>
<b>Animals</b>	0.50%	0.71%	0.55%	0.84%
600 Small Animal/Bird	0.40%	0.56%	0.45%	0.72%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing	0.10%	0.14%	0.10%	0.12%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	44.37%	18.19%	44.01%	15.39%
300 Material or Equipment Fault/Failure	44.37%	18.19%	44.01%	15.39%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	46.55%	48.38%	46.36%	41.17%
400 Decay/Age of Material/Equipment	1.19%	1.97%	1.18%	1.67%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.34%	0.85%	0.34%	0.72%
430 Tree failure from overhang or dead tr	45.01%	45.56%	44.84%	38.78%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: SIDEVIEW**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	SIDEVIEW
Substation Location	
Circuit	224 Judy
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	369
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>470</b>	<b>1.9214</b>	<b>475</b>	<b>2.2772</b>
<b>Maintenance</b>	46.55%	48.38%	46.36%	41.17%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	3.98%	7.33%	4.52%	21.12%
100 Construction	3.64%	6.49%	3.61%	5.49%
110 Maintenance	0.34%	0.85%	0.91%	15.63%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	3.85%	24.54%	3.82%	20.76%
700 Customer-Caused				
710 Motor Vehicle	3.85%	24.54%	3.82%	20.76%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.05%	0.28%	0.05%	0.24%
999 Cause Unknown	0.05%	0.28%	0.05%	0.24%
<b>Weather</b>	0.70%	0.56%	0.69%	0.48%
500 Lightning	0.29%	0.42%	0.29%	0.36%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: SIDEVIEW**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	SIDEVIEW
Substation Location	
Circuit	224 Judy
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	369
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>470</b>	<b>1.9214</b>	<b>475</b>	<b>2.2772</b>
<b>Weather</b>	0.70%	0.56%	0.69%	0.48%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees	0.40%	0.14%	0.40%	0.12%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: STANTON

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	<i>Powell County - Halls Road - Stanton</i>
Circuit	124 Morris Creek
Circuit Location	<i>Spencer Cable to Morris Creek</i>
Total Circuit Length (miles)	<i>40.13</i>
Average Member Count	722
Date of last Trim	<i>2012</i>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>149</b>	<b>2.0499</b>	<b>661</b>	<b>6.7645</b>
<b>Animals</b>	22.02%	41.76%	5.75%	14.23%
600 Small Animal/Bird	0.52%	0.68%	0.38%	0.74%
601 Squirrel	21.50%	41.08%	5.38%	13.49%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	3.32%	2.70%	39.74%	35.11%
300 Material or Equipment Fault/Failure	3.32%	2.70%	39.68%	35.05%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.06%	0.06%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	42.53%	32.84%	43.10%	37.88%
400 Decay/Age of Material/Equipment			0.58%	0.76%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	3.90%	3.65%	2.81%	5.55%
430 Tree failure from overhang or dead tr	38.63%	29.19%	39.71%	31.57%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: STANTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	
Circuit	124 Morris Creek
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	722
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>149</b>	<b>2.0499</b>	<b>661</b>	<b>6.7645</b>
<b>Maintenance</b>	42.53%	32.84%	43.10%	37.88%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	14.13%	13.65%	5.39%	8.60%
100 Construction	12.32%	8.85%	3.73%	4.05%
110 Maintenance	1.81%	4.80%	1.65%	4.55%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	17.18%	7.97%	4.81%	2.83%
700 Customer-Caused	8.06%	0.07%	2.64%	0.14%
710 Motor Vehicle	0.64%	0.34%	0.21%	0.27%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	8.48%	7.57%	1.95%	2.42%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.63%	0.74%	0.64%	0.70%
999 Cause Unknown	0.63%	0.74%	0.64%	0.70%
<b>Weather</b>	0.17%	0.34%	0.57%	0.66%
500 Lightning	0.17%	0.34%	0.47%	0.61%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: STANTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	
Circuit	124 Morris Creek
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	722
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>149</b>	<b>2.0499</b>	<b>661</b>	<b>6.7645</b>
<b>Weather</b>	0.17%	0.34%	0.57%	0.66%
510 Wind, Not Trees			0.05%	0.02%
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			0.05%	0.02%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: STANTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	Powell County - Halls Road - Stanton
Circuit	134 Top Ckt-Roslyn
Circuit Location	Roslyn Feed
Total Circuit Length (miles)	26.07
Average Member Count	671
Date of last Trim	2012

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>112</b>	<b>1.2787</b>	<b>286</b>	<b>3.4411</b>
<b>Animals</b>	3.07%	5.59%	15.15%	21.13%
600 Small Animal/Bird	1.21%	2.21%	1.00%	1.56%
601 Squirrel	1.87%	3.38%	14.14%	19.58%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	1.24%	1.17%	4.07%	3.64%
300 Material or Equipment Fault/Failure	1.09%	0.93%	3.56%	2.82%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.15%	0.23%	0.51%	0.82%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	90.32%	86.71%	62.75%	53.79%
400 Decay/Age of Material/Equipment	0.11%	0.12%	1.39%	1.91%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	79.09%	79.14%	36.26%	33.69%
430 Tree failure from overhang or dead tr	9.35%	5.83%	24.41%	17.58%
440 Trees With Ice/Snow	1.77%	1.63%	0.69%	0.61%
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: STANTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	
Circuit	134 Top Ckt-Rosslyn
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	671
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>112</b>	<b>1.2787</b>	<b>286</b>	<b>3.4411</b>
<b>Maintenance</b>	90.32%	86.71%	62.75%	53.79%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	3.71%	3.96%	9.89%	12.99%
100 Construction	3.25%	2.21%	6.57%	4.63%
110 Maintenance	0.46%	1.75%	3.29%	8.32%
190 Other Planned			0.03%	0.04%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	1.03%	1.63%	2.85%	2.64%
700 Customer-Caused				
710 Motor Vehicle			2.13%	1.91%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	1.03%	1.63%	0.40%	0.61%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			0.31%	0.13%
<b>Unknown</b>	0.06%	0.12%	1.36%	2.38%
999 Cause Unknown	0.06%	0.12%	1.36%	2.38%
<b>Weather</b>	0.56%	0.82%	3.93%	3.42%
500 Lightning	0.56%	0.82%	1.20%	1.43%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: STANTON**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	STANTON
Substation Location	
Circuit	134 Top Ckt-Rossllyn
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	671
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>112</b>	<b>1.2787</b>	<b>286</b>	<b>3.4411</b>
<b>Weather</b>	0.56%	0.82%	3.93%	3.42%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			2.73%	1.99%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: THREE FORKS

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>THREE FORKS</u>
Substation Location	<u>Madison ThreeForks Road - Richmond</u>
Circuit	<u>214 Madison Village</u>
Circuit Location	<u>Madison Village</u>
Total Circuit Length (miles)	<u>12.39</u>
Average Member Count	<u>464</u>
Date of last Trim	<u>2018</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	335	3.3621	883	8.1401
<b>Animals</b>	23.42%	30.06%	11.46%	14.11%
600 Small Animal/Bird	23.42%	30.06%	8.89%	12.42%
601 Squirrel			2.58%	1.69%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.13%	0.32%	2.98%	2.75%
300 Material or Equipment Fault/Failure	0.13%	0.32%	2.89%	2.65%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.09%	0.11%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	73.71%	66.60%	82.27%	77.79%
400 Decay/Age of Material/Equipment	46.36%	29.81%	17.73%	12.60%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	2.04%	2.05%	12.68%	13.95%
430 Tree failure from overhang or dead tr	25.30%	34.74%	51.59%	51.18%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture			0.26%	0.05%
470 Borrower crew cuts tree				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: THREE FORKS**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	THREE FORKS
Substation Location	
Circuit	214 Madison Village
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	464
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>335</b>	<b>3.3621</b>	<b>883</b>	<b>8.1401</b>
<b>Maintenance</b>	73.71%	66.60%	82.27%	77.79%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.01%	1.09%	2.29%	3.81%
100 Construction	0.95%	0.90%	1.68%	2.36%
110 Maintenance	0.06%	0.19%	0.61%	1.46%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	0%	0%
700 Customer-Caused				
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.71%	0.96%	0.27%	0.40%
999 Cause Unknown	0.71%	0.96%	0.27%	0.40%
<b>Weather</b>	1.01%	0.96%	0.73%	1.14%
500 Lightning	1.01%	0.96%	0.73%	1.14%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: THREE FORKS**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	THREE FORKS
Substation Location	
Circuit	214 Madison Village
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	464
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	335	3.3621	883	8.1401
<b>Weather</b>	1.01%	0.96%	0.73%	1.14%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: THREE FORKS

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>THREE FORKS</u>
Substation Location	<u>Madison - ThreeForks Road - Richmond</u>
Circuit	<u>234 Three Forks-Pineur Rd</u>
Circuit Location	<u>ThreeForks - Pineur Road</u>
Total Circuit Length (miles)	<u>14.45</u>
Average Member Count	<u>150</u>
Date of last Trim	<u>2018</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>103</b>	<b>.6200</b>	<b>468</b>	<b>3.4133</b>
<b>Animals</b>	0.36%	1.08%	18.48%	22.07%
600 Small Animal/Bird			3.08%	4.49%
601 Squirrel	0.36%	1.08%	15.40%	17.58%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	88.31%	79.57%	22.79%	18.55%
300 Material or Equipment Fault/Failure	88.31%	79.57%	22.79%	18.55%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	0%	0%	47.37%	46.29%
400 Decay/Age of Material/Equipment			0.55%	0.20%
410 Corrosion/Abrasion of Material/Equipm			29.23%	23.05%
420 Tree Growth			0.48%	0.59%
430 Tree failure from overhang or dead tr			5.82%	10.16%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: THREE FORKS

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	THREE FORKS
Substation Location	
Circuit	234 Three Forks-Pineur Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	150
Date of last Trim	

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>103</b>	<b>.6200</b>	<b>468</b>	<b>3.4133</b>
<b>Maintenance</b>	0%	0%	47.37%	46.29%
490 Maintenance, Other			11.30%	12.30%
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0.95%	4.30%	1.19%	4.10%
100 Construction	0.14%	1.08%	0.34%	1.56%
110 Maintenance	0.80%	3.23%	0.85%	2.54%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.42%	1.08%	4.03%	2.34%
700 Customer-Caused			2.42%	0.20%
710 Motor Vehicle	0.42%	1.08%	1.60%	2.15%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	7.72%	10.75%	3.70%	5.08%
999 Cause Unknown	7.72%	10.75%	3.70%	5.08%
<b>Weather</b>	2.24%	3.23%	2.45%	1.56%
500 Lightning	2.24%	3.23%	0.94%	0.98%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: THREE FORKS

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	THREE FORKS
Substation Location	
Circuit	234 Three Forks-Pineur Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	150
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	103	.6200	468	3.4133
<b>Weather</b>	2.24%	3.23%	2.45%	1.56%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other			1.51%	0.59%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: TRAPP

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	TRAPP
Substation Location	Clark - Trapp/Goffs Corner - Trapp
Circuit	114 Trapp Goffs Corner Rd
Circuit Location	Trapp/Goffs Corner Road
Total Circuit Length (miles)	23.94
Average Member Count	214
Date of last Trim	2011                      Herbicide 2013

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>253</b>	<b>1.4393</b>	<b>807</b>	<b>5.0610</b>
<b>Animals</b>	1.57%	4.55%	0.73%	1.86%
600 Small Animal/Bird			0.08%	0.19%
601 Squirrel	1.57%	4.55%	0.65%	1.67%
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.19%	0.32%	10.68%	12.24%
300 Material or Equipment Fault/Failure	0.19%	0.32%	10.42%	11.97%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			0.26%	0.28%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	86.86%	76.62%	70.17%	59.74%
400 Decay/Age of Material/Equipment			3.37%	6.40%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			1.77%	1.67%
430 Tree failure from overhang or dead tr	86.86%	76.62%	65.03%	51.67%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: TRAPP**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	TRAPP
Substation Location	
Circuit	114 Trapp Goffs Corner Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	214
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>253</b>	<b>1.4393</b>	<b>807</b>	<b>5.0610</b>
<b>Maintenance</b>	86.86%	76.62%	70.17%	59.74%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	4.54%	7.14%	3.34%	5.66%
100 Construction	4.12%	5.19%	3.05%	4.36%
110 Maintenance	0.42%	1.95%	0.26%	1.21%
190 Other Planned			0.02%	0.09%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	1.31%	3.90%	0.83%	1.39%
700 Customer-Caused				
710 Motor Vehicle			0.42%	0.28%
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other	1.31%	3.90%	0.41%	1.11%
<b>Unknown</b>	0.83%	1.62%	11.95%	16.05%
999 Cause Unknown	0.83%	1.62%	11.95%	16.05%
<b>Weather</b>	4.70%	5.84%	2.31%	3.06%
500 Lightning	4.70%	5.84%	2.31%	3.06%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: TRAPP**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	TRAPP
Substation Location	
Circuit	114 Trapp Goffs Corner Rd
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	214
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	253	1.4393	807	5.0610
<b>Weather</b>	4.70%	5.84%	2.31%	3.06%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: UNION CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>UNION CITY</u>
Substation Location	<u>MADISON - Union City Road - Richmond</u>
Circuit	<u>214 Hampton Rdg-Four Mile</u>
Circuit Location	<u>Four Mile - Hampton Ridge</u>
Total Circuit Length (miles)	<u>44.73</u>
Average Member Count	<u>474</u>
Date of last Trim	<u>2018</u>

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>54</b>	<b>1.2764</b>	<b>123</b>	<b>1.7889</b>
<b>Animals</b>	0%	0%	0.38%	0.36%
600 Small Animal/Bird			0.38%	0.36%
601 Squirrel				
610 Large Animal				
611 Cattle Rubbing				
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0%	0%	0.44%	0.36%
300 Material or Equipment Fault/Failure			0.44%	0.36%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload				
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	77.35%	86.61%	35.24%	62.81%
400 Decay/Age of Material/Equipment	72.03%	85.45%	32.37%	61.74%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	5.32%	1.16%	2.87%	1.07%
430 Tree failure from overhang or dead tr				
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: UNION CITY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	UNION CITY
Substation Location	
Circuit	214 Hampton Rdg-Four Mile
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	474
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>54</b>	<b>1.2764</b>	<b>123</b>	<b>1.7889</b>
<b>Maintenance</b>	77.35%	86.61%	35.24%	62.81%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	12.92%	10.74%	10.54%	19.67%
100 Construction	10.63%	9.42%	8.87%	17.28%
110 Maintenance	2.30%	1.32%	1.67%	2.38%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0%	0%	3.08%	1.43%
700 Customer-Caused			0.57%	0.12%
710 Motor Vehicle				
720 Aircraft				
730 Fire			0.46%	0.36%
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other			2.05%	0.95%
<b>Unknown</b>	0%	0%	44.46%	12.63%
999 Cause Unknown			44.46%	12.63%
<b>Weather</b>	9.73%	2.64%	5.86%	2.74%
500 Lightning	0.42%	0.33%	1.68%	1.07%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: UNION CITY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	UNION CITY
Substation Location	
Circuit	214 Hampton Rdg-Four Mile
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	474
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>54</b>	<b>1.2764</b>	<b>123</b>	<b>1.7889</b>
<b>Weather</b>	9.73%	2.64%	5.86%	2.74%
510 Wind, Not Trees	2.40%	0.66%	1.08%	0.48%
520 Ice, Sleet, Frost, Not Trees	6.90%	1.65%	3.10%	1.19%
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: UNION CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>UNION CITY</u>
Substation Location	<u>MADISON - Union City Road - Richmond</u>
Circuit	<u>224 Hackett Pk-Hampton Rdg</u>
Circuit Location	<u>Union City Road - Hackett Pike</u>
Total Circuit Length (miles)	<u>44.71</u>
Average Member Count	<u>533</u>
Date of last Trim	<u>2018</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
Total Minutes/Frequency	181	1.2064	611	3.9606
<b>Animals</b>	0.66%	1.24%	3.36%	4.12%
600 Small Animal/Bird	0.15%	0.16%	0.04%	0.05%
601 Squirrel	0.51%	1.09%	0.77%	1.42%
610 Large Animal			0.27%	0.38%
611 Cattle Rubbing			1.20%	1.14%
612 Animal/Large Bird			1.08%	1.14%
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	92.66%	83.51%	30.88%	28.14%
300 Material or Equipment Fault/Failure	92.57%	83.36%	30.53%	27.76%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload	0.09%	0.16%	0.35%	0.38%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	1.10%	3.73%	24.12%	21.41%
400 Decay/Age of Material/Equipment			0.44%	0.66%
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth	0.19%	0.31%	1.83%	2.42%
430 Tree failure from overhang or dead tr	0.90%	3.42%	21.85%	18.33%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: UNION CITY**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	UNION CITY
Substation Location	
Circuit	224 Hacket Pk-Hampton Rdg
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	533
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	<b>181</b>	<b>1.2064</b>	<b>611</b>	<b>3.9606</b>
<b>Maintenance</b>	1.10%	3.73%	24.12%	21.41%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	0.76%	2.95%	2.40%	4.78%
100 Construction	0.42%	1.09%	1.38%	2.70%
110 Maintenance	0.34%	1.87%	1.00%	1.99%
190 Other Planned			0.02%	0.09%
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	0.81%	2.02%	22.37%	25.63%
700 Customer-Caused			8.71%	0.24%
710 Motor Vehicle			13.42%	24.77%
720 Aircraft				
730 Fire				
740 Public Cuts Tree	0.81%	2.02%	0.24%	0.62%
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	1.48%	1.40%	3.28%	4.74%
999 Cause Unknown	1.48%	1.40%	3.28%	4.74%
<b>Weather</b>	2.54%	5.13%	13.59%	11.18%
500 Lightning	2.54%	5.13%	13.59%	11.18%

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

### Substation: UNION CITY

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	UNION CITY
Substation Location	
Circuit	224 Hacket Pk-Hampton Rdg
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	533
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	181	1.2064	611	3.9606
<b>Weather</b>	2.54%	5.13%	13.59%	11.18%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: VAN METER**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	<u>VAN METER</u>
Substation Location	<u>Clark County - Van Meter Road - Winchester</u>
Circuit	<u>134 Van Meter Rd-Single</u>
Circuit Location	<u>Van Meter Road</u>
Total Circuit Length (miles)	<u>9.62</u>
Average Member Count	<u>54</u>
Date of last Trim	<u>2012</u>

	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
<b>Total Minutes/Frequency</b>	<b>250</b>	<b>.5370</b>	<b>477</b>	<b>3.4630</b>
<b>Animals</b>	0%	0%	5.67%	10.70%
600 Small Animal/Bird			4.32%	8.56%
601 Squirrel			0.68%	1.07%
610 Large Animal				
611 Cattle Rubbing			0.68%	1.07%
612 Animal/Large Bird				
620 Animal damage-gnawing or boring				
690 Animal, Other				
<b>Equipment or Installation/Design</b>	0.81%	3.45%	5.83%	6.95%
300 Material or Equipment Fault/Failure	0.81%	3.45%	0.42%	0.53%
310 Installation Fault				
320 Conductor Sag or Inadequate Clearance				
340 Overload			5.41%	6.42%
350 Miscoordination of Protection Devices				
360 Other Equipment Installation/Design				
<b>Maintenance</b>	0%	0%	29.63%	45.99%
400 Decay/Age of Material/Equipment				
410 Corrosion/Abrasion of Material/Equipm				
420 Tree Growth			8.30%	8.56%
430 Tree failure from overhang or dead tr			21.34%	37.43%
440 Trees With Ice/Snow				
450 Contamination (leakage/external)				
460 Moisture				
470 Borrower crew cuts tree				

## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: VAN METER**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	VAN METER
Substation Location	
Circuit	134 Van Meter Rd-Single
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	54
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	250	.5370	477	3.4630
<b>Maintenance</b>	0%	0%	29.63%	45.99%
490 Maintenance, Other				
<b>Other</b>	0%	0%	0%	0%
800 Other				
801 Supervisor Review				
<b>Planned Outage</b>	1.09%	24.14%	2.59%	14.97%
100 Construction	0.59%	3.45%	2.33%	11.76%
110 Maintenance	0.50%	20.69%	0.26%	3.21%
190 Other Planned				
<b>Power Supply</b>	0%	0%	0%	0%
000 Power Supply				
<b>Public</b>	85.42%	3.45%	44.70%	0.53%
700 Customer-Caused	85.42%	3.45%	44.70%	0.53%
710 Motor Vehicle				
720 Aircraft				
730 Fire				
740 Public Cuts Tree				
750 Vandalism				
760 Switching error or caused by construc				
790 Public, Other				
<b>Unknown</b>	0.79%	3.45%	0.42%	0.53%
999 Cause Unknown	0.79%	3.45%	0.42%	0.53%
<b>Weather</b>	11.89%	65.52%	11.15%	20.32%
500 Lightning	11.89%	65.52%	11.15%	20.32%



## PSC Report

Excluding Major Event Day Outages, Customer Responsible Outages and Momentary Outages

**Substation: VAN METER**

1/1/2021 12:00:00 AM to 12/31/2021 11:59:59 PM

Substation	VAN METER
Substation Location	
Circuit	134 Van Meter Rd-Single
Circuit Location	
Total Circuit Length (miles)	
Average Member Count	54
Date of last Trim	

Total Minutes/Frequency	Totals		5 Year Average	
	SAIDI	SAIFI	SAIDI	SAIFI
	250	.5370	477	3.4630
<b>Weather</b>	11.89%	65.52%	11.15%	20.32%
510 Wind, Not Trees				
520 Ice, Sleet, Frost, Not Trees				
530 Flood				
590 Weather, Other				

# KENTUCKY PUBLIC SERVICE COMMISSION

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## SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

### INCLUDE CURRENT VEGETATION MANAGEMENT PLAN

Additional page may be attached as needed.

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## SECTION 7: UTILITY COMMENTS

The reporting year 2021 proved to be a trying year for reliability. In February, Clark Energy encountered two consecutive ice storms causing numerous outages and over 90 broken pole. We also have had several rain and floods which have caused many slips in areas with trees falling outside on maintained right of way. We have also experienced damage caused by the Emeralds Ash Borer that have killed numerous Ash trees that have also contributed to outages. Most of the reported outages were weather related either by wet soil conditions, flooding or trees that were damaged by the ice storm. We have in the previous years began a more aggressive right of way program but the trees that fall outside of maintained are hard to defend against.

# Distribution Line Vegetation Management

## Maintaining Reliable Service

Trees are part of the natural beauty of our service area, but trees and other vegetation are also one of the leading causes of power outages for our members. In order to keep electricity reliable, we have a responsibility to protect the lines that deliver it to homes and businesses across our service territory.

Clark Energy is responsible for maintaining more than 3,000 miles of distribution lines. Vegetation management is part of our power line maintenance program that helps us provide safe and reliable electric service for its members.

Vegetation management along distribution rights of way helps reduce power outages for customers and enhances safety for our employees and contractors. We use an inspection process that identifies vegetation that could be a hazard to the lines and ensures that vegetation management activities follow our pruning and clearance specifications.

We regularly use tree-trimming contractors to conduct much of our vegetation management work. These qualified contractors are required to follow industry standards and guidelines for safety, quality and tree health.

Customers, property owners and untrained contractors should not prune or cut trees and plants near power lines.

Customers who have questions or concerns about right-of-way or vegetation maintenance can contact Clark Energy Right-of-Way Coordinator at 1-800-992-3269 Ext. 210. Our representatives can provide general information on vegetation and right-of-way issues, or they can connect customers to a vegetation management specialist.

## Vegetation Management Methods

As a regulated public utility, Clark Energy must balance the needs of our customers with the need to control costs and provide safe and reliable electric service.

To maintain reliable service and minimize outages, it is important that we maintain trees and other vegetation along the lines that deliver electricity to our customers.

We hire qualified, trained tree personnel to inspect and clear vegetation that poses a threat to our power lines. Our integrated approach to managing vegetation in rights of way includes:

- **Planned maintenance** – including tree pruning or felling.
- **Reactive pruning** – trimming vegetation with a high risk of interference with overhead distribution lines.
- **Felling trees** – cutting down trees inside or outside the right of way that are discovered to be at risk of falling on or otherwise threatening power lines.
- **Mowing** – maintaining the floor of the right of way.

- **Tree growth management tools** – proven products used by arborists for many years to maintain tree health. Once these are applied, a tree will begin to direct more nutrients to its roots, making the overall tree stronger and less susceptible to drought. This approach can be an effective way to reduce the amount of vegetation that requires pruning when performing routine tree maintenance. These products do not eliminate the need for trimming, but they can be less intrusive for property owners, less noticeable on the trees and less disruptive to a well-established tree canopy. This is currently applicable to distribution lines on a limited scope.
- **Herbicide application** – the use of United States EPA-registered and -approved herbicides to control vegetation.

Tree maintenance practices vary based on the voltage and type of line, as well as the type of tree and its proximity to the line. In some cases, the tree may need to be cut down to provide safe and reliable operation of the line.

There are a variety of factors that determine whether or not a tree must be trimmed or cut down.

The methods used and scope of work are determined by a number of factors, including:

- **Voltage of the line**
- **Width and location of the right of way**
- **Type, mature height and compatibility of vegetation around the power lines**
- **Federal and state requirements and other agreements that govern vegetation management**
- **Proximity to environmentally sensitive areas**
- **Type of power line facility construction**

## Directional Pruning

Our program uses a technique called directional pruning where applicable to maintain tree health while establishing acceptable clearance between power lines and tree branches. This pruning technique was developed by the Tree Care Industry Association, approved by the American National Standard Institute (ANSI), adopted by the arboriculture industry as its standard and endorsed by the Arbor Day Foundation.

## Distribution Lines & Integrated Vegetation Management

Distribution lines carry electricity throughout a town or community from substations to the homes and businesses that we serve. They can be located underground or overhead on utility poles. Overhead distribution lines are the lines that most commonly experience outages caused by trees or other vegetation. Below are illustrations of distribution power lines:

Trees and other vegetation can pose a potential reliability and safety hazard to these lines if they are not managed proactively. Clark Energy distribution line rights of way are typically maintained at 20 feet from center line on each side of center for single phase construction with a total clearing width of 40 feet and 24 feet from center line either side on multi-phase construction with a total clearing width of 48 feet allowing crews to maintain vegetation a minimum of 20-24 feet on each side of the right-of-

way centerline.

Trees and vegetation along distribution lines can often be trimmed rather than cut down. If, however, the vegetation poses a threat to the line that cannot be resolved by trimming, or if the vegetation may interfere with the line before we return for our next period of planned maintenance, it may need to be cut down.

Crews use a combination of vegetation management methods to help ensure system reliability. We use an industry-approved technique called directional pruning to maintain tree health while establishing acceptable clearance between energized wires and tree branches. At times, we may contact the customer to discuss pruning or cutting down trees to eliminate reliability issues due to re-growth before the next planned maintenance.

We work proactively with customers, property owners, homeowner associations and community leaders to keep them informed of vegetation and right-of-way management activities in their area.

In residential, commercial and maintained areas, we strive to notify our customers before any vegetation maintenance work begins. We typically notify customers with a door hanger, but we may also call, send a letter or knock on your door where work is being performed. Sometimes notification includes a combination of these methods. We'll also provide a point of contact in case you have questions or concerns about the work being done. If our attempts to notify a customer are unsuccessful, work will proceed without further notification.

Although a notice is typical, there are exceptions: a tree may be cut down sooner with customer acknowledgment or if it poses an immediate threat to the reliable operation of the power line. Trees that must be pruned or cut down may include live and dead, diseased or damaged trees, and they can be located inside or outside the right of way. This type of scenario would occur during weather events that we do not have control over. All debris from these events are left on site

## • Contact Us

For questions or concerns about rights of way or vegetation maintenance please contact Clark Energy  
1-800-992-3269 Ext.210

**CONTACT US**