



LICKING VALLEY
RURAL ELECTRIC COOPERATIVE CORPORATION
P. O. Box 605 • 271 Main Street
West Liberty, KY 41472-0605
(606) 743-3179



January 16, 2024

RECEIVED

JAN 29 2024

PUBLIC SERVICE
COMMISSION

Director of Engineering
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602

Dear Sir:

Enclosed you will find Licking Valley Rural Electric Cooperative Corporation's Electric Distribution Utility Annual Reliability and Accountability Report for the year ending 2023.

If additional information is needed, please let us know.

Sincerely,

Chris Murphy
Superintendent of Operations

CM:cjc

Report prepared for:

LICKING VALLEY RURAL ELECTRIC COOPERATIVE CORPORATION

Prepared by:

Chelsea Cantrell
csteele@lvrecc.com
606-743-7500

2023 Annual Reliability Report

Major Event Days

SAIDI Value 225.2594

First Date Used to Determine T'Med-----January 12, 2023

Last Date Used to Determine T'Med----- September 9, 2023

**Number of MED in Report Year----21
 (19 Storms)
 (2 Substation outages)
 (1 of which was a blink.)
 (1 was due to East Ky Outage)**

System Reliability Information and Results

System-Wide Information

Total consumers 18,052

Total Circuits 36

System-Wide Results

Excluding MED

Reporting Year	5 Year Average
SAIDI 138.3854	161.36
SAIFI 1.2479	1.36

Including MED

Reporting Year	5 Year Average
SAIDI 363.6448	758.17
SAIFI 2.2158	2.24

Ten Worst Performing Circuits and Major Outage Category Without T'Med for SAIFI Index:

Substation	Circuit	SAIFI Value	Major Cause
Helechawa	Vancleve Circuit	4.5101	Right of Way Out
Helechawa	Belknap Circuit	3.4467	Planned
Sublett	Gunlock Circuit	3.2157	Planned
Campton	Vortex Circuit	2.3718	Planned
Sublett	Carver Circuit	2.0820	Planned
Maytown	Pomeroyton Circuit	1.7121	Planned
Hot Mix	519 Circuit	1.6906	Planned
Campton	Stillwater Circuit	1.4010	Equipment Fail
Maggard	Rockhouse Circuit	1.3334	Planned
Campton	Pine Ridge Circuit	1.2104	Consumer Caused

Ten Worst Performing Circuits and Major Outage Category Without T'Med for SAIDI Index:

Substation	Circuit	SAIDI Value	Major Cause
Helechawa	Vancleve Circuit	514.4154	Right of Way Out
Campton	Vortex Circuit	411.9052	Right of Way In
Sublett	Gunlock Circuit	394.6897	Planned
Sublett	Carver Circuit	335.1071	Planned
Maytown	Pomeroyton Circuit	328.6605	Planned
Sublett	Gun Creek Circuit	317.2793	Equipment Fail
Helechawa	Belknap Circuit	223.8133	Planned
Campton	Stillwater Circuit	172.9582	Equipment Fail
Maggard	Rockhouse Circuit	171.6989	Planned
Zachariah	Leeco Circuit	171.6928	Planned

System-Wide SAIFI, SAIDI, and CAIDI for the past 5 years, Includes T'Med

	2019	2020	2021	2022	2023
SAIFI	1.8651	1.5720	2.9104	2.6595	2.2158
SAIDI	288.6765	244.7829	2511.0391	382.7452	363.6448
CAIDI	154.78	155.71	862.78	143.92	338.4688

System-Wide SAIFI, SAIDI, and CAIDI for the past 5 years, Excludes T'Med

	2019	2020	2021	2022	2023
SAIFI	1.3666	1.2360	1.3721	1.5963	1.2479
SAIDI	199.2011	163.5087	152.2485	153.4598	138.3854
CAIDI	145.76	132.29	110.96	121.2224	118.6471

Circuit Reporting

Circuits With SAIFI or SAIDI Value Higher Than 5 Year Average

Circuit Reporting

Substation # 3, Helechawa Substation, located on Hwy 205 in Wolfe County, near exit 57 off Mountain Parkway.

Circuit # 1, Hazel Green Circuit; this circuit serves areas of Highway 205, Highway 191, and Hazel Green

This circuit has approximately 101.3 miles of line and has approximately 727 consumers.

This circuit was cut out in 2017-2019.

Causes and percentages for this circuit:

Cause	SAIFI	Cause	SAIDI
Planned	41%	Planned	15%
Right of Way Out	17%	Right of Way out	7%
Consumer Caused	4%	Consumer Caused	3%
Animals	2%		
Equipment Failure	1%		

Circuit 5 Year Average SAIFI—0.6701

Reporting Year, 2023, SAIFI— .6984

Circuit 5 Year Average SAIDI—68.6811

Reporting Year, 2023, SAIDI—76.2904

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation # 3, Helechawa Substation, located on Hwy 205 in Wolfe County, near exit 57 off Mountain Parkway.

Circuit # 2, Cannel City Circuit; this circuit serves areas of Upper Stacy Fork, Cannel City, Johnson Fork, Adele and Cow Creek.

This circuit has approximately 123.4 miles of line and has approximately 817 consumers.

This circuit was cut out in 2017-2019.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Right of Way Out	28%	56%
Planned	23%	10%
Equipment Fail	5%	1%
Right of Way In	5%	3%
Unknown	2%	
Animals	1%	
Consumer Caused	1%	

Circuit 5 Year Average SAIFI—1.0055

Reporting Year, 2023, SAIFI—.8320

Circuit 5 Year Average SAIDI—95.6169

Reporting Year, 2023, SAIDI—163.9729

We have no control over right-of-way outside of our cutting area, however, any danger trees that we see outside of our right-of-way, we will cut.

Circuit Reporting

Substation # 3: Helechawa Substation, located on Hwy 205 in Wolfe County, near exit 57 off Mountain Parkway.

Circuit # 3, Vancleve Circuit; this circuit serves the areas of Highway 205, Highway 15 and 5 mile.

This circuit has approximately 79.7 miles of line and serves approximately 588 consumers.

This circuit was cut out in 2017 -2019.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Right of Way Outside	31%	38%
Planned	19%	5%
Equipment Fail	12%	6%
Consumer Caused	4%	2%
Right of Way In	1%	1%
Animals		1%

Circuit 5 Year Average SAIFI—1.8675

Reporting Year, 2023, SAIFI—4.5101

Circuit 5 Year Average SAIDI—237.4949

Reporting Year, 2023, SAIDI—514.4154

We have no control over right-of-way outside of our cutting area, however, any danger trees that we see outside of our right-of-way, we will cut.

Circuit Reporting

Substation # 3: Helechawa Substation, located on Hwy 205 in Wolfe County, near exit 57 off Mountain Parkway.

Circuit # 4, Belknap Circuit; this circuit serves the areas of Hwy 1094, Banks Fork, Hwy 378, Lower Taulbee Fork, and Davis Fork.

This circuit has approximately 66.7 miles of line and serves approximately 356 consumers.

This circuit was cut out in 2017 -2019.

Causes and percentages for this circuit:

Cause	SAIFI	SAIDI
Planned	60%	38%
Right of Way Out	11%	8%
Right of Way In		1%

Circuit 5 Year Average SAIFI—2.0766

Reporting Year, 2023, SAIFI—3.4467

Circuit 5 Year Average SAIDI—223.6773

Reporting Year, 2023, SAIDI—223.8133

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Circuit Reporting

Substation # 4, Hot Mix Substation, located on Sugar Camp Road in Morgan County.

Circuit # 1; Elkfork Circuit; this circuit serves areas of HWY 1161, HWY 172, Cow Branch, Indian Creek.

This circuit has approximately 45.4 miles of line and serves approximately 285 consumers.

This circuit was cut out in 2019-2020.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Planned	28%	4%
Right of Way Out	20%	25%
Animals	1%	1%
Unknown	1%	1%
Equipment Fail	1%	

Circuit 5 Year Average SAIFI—.6466

Reporting Year, 2023, SAIFI—.5775

Circuit 5 Year Average SAIDI—58.9857

Reporting Year, 2023, SAIDI—70.7612

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

We have no control over right-of-way outside of our cutting area, however, any danger trees that we see outside of our right-of-way, we will cut.

Circuit Reporting

Substation # 4, Hot Mix Substation, located on Sugar Camp Road in Morgan County.

Circuit # 4; 519 Circuit; this circuit serves areas of HWY 772, HWY 1002, HWY 519, Frank Blevins Rd., Hickory Rd, Zag Rd.

This circuit has approximately 123.2 miles of line and serves approximately 905 consumers.

This circuit was cut out in 2019-2020.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Planned	61%	34%
Right of Way Out	4%	3%
Equipment Fail	3%	2%
Animals	2%	1%
Right of Way In	2%	1%
Unknown		1%

Circuit 5 Year Average SAIFI—1.0353

Reporting Year, 2023, SAIFI—1.6906

Circuit 5 Year Average SAIDI—101.6294

Reporting Year, 2023, SAIDI—126.8223

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation #5, Maggard Substation, located on Rt. 1081 at Coon Creek in Magoffin County.

Circuit # 1; Rockhouse Circuit, this circuit serves areas of Improvement Fork, Rockhouse, and Logville.

This circuit has approximately 38.1 miles of line and serves approximately 276 consumers.

This circuit was cut out in 2013 & 2014.

Causes and percentages for this circuit

Cause	% SAIFI	% SAIDI
Planned	47%	17%
Unknown	19%	17%
Other	10%	8%
Right of Way In	3%	2%
Equipment Fail	1%	1%

Circuit 5 Year Average SAIFI—1.5633

Reporting Year, 2023, SAIFI—1.3334

Circuit 5 Year Average SAIDI—134.1690

Reporting Year, 2023, SAIDI—171.689

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation # 6, Sublett Substation, located on Rt 7 near Royalton in Magoffin County.

Circuit # 3; Gunlock Circuit; this circuit serves areas of Swampton, Puncheon, Big Half Mountain, Trace Fork, Salt Lick, Long Branch and Gypsy.

This circuit has approximately 121.4 miles of line and serves approximately 866 consumers.

This circuit was cut out in 2012 & 2013.

Causes and percentages for this circuit:

Cause	SAIFI	SAIDI
Planned	53%	41%
Equipment Fail	11%	10%
Right of Way Out	6%	6%
Right of way In	4%	3%
Unknown	1%	1%
Consumer Caused	1%	1%
Right of Way Crew	1%	6%
Animals	1%	1%

Circuit 5 Year Average SAIFI—2.9218

Reporting Year, 2023, SAIFI—3.2157

Circuit 5 Year Average SAIDI—372.1907

Reporting Year, 2023, SAIDI—394.6897

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation # 6, Sublett Substation, located on Rt 7 near Royalton in Magoffin County.

Circuit # 4; Gun Creek Circuit; this circuit serves areas of Gun Creek, Blaze Br., Fletcher Br.

This circuit has approximately 13.6 miles of line and serves approximately 144 consumers.

This circuit was cut out in 2012 & 2013.

Causes and percentages for this circuit:

Cause	SAIFI	SAIDI
Equipment Fail	24%	18%
Right of Way Out	23%	12%
Planned	16%	2%
Animals	1%	

Circuit 5 Year Average SAIFI—1.2022

Reporting Year, 2023, SAIFI—1.1875

Circuit 5 Year Average SAIDI—169.2667

Reporting Year, 2023, SAIDI—317.2793

Equipment fail is out of our control.

Circuit Reporting

Substation # 7, Campton Substation, located on Rt 15 in Campton, Wolfe County.

Circuit # 3, Vortex Circuit, this circuit serves areas of Hwy 15, Flat Mary, Big Bloody and Bethany.

This circuit has approximately 92.4 miles of line and serves approximately 563 consumers.

This circuit was cut out in 2015 & 2016.

Causes and percentages for this circuit:

Causes	% SAIFI	% SAIDI
Planned	25%	16%
Right of Way In	13%	19%
Equipment Fail	4%	1%
Right of Way Out	3%	3%
Consumer Caused	1%	
Unknown	1%	
Animals	1%	

Circuit 5 Year Average SAIFI—3.3994

Reporting Year, 2023, SAIFI—2.3718

Circuit 5 Year Average SAIDI—348.6610

Reporting Year, 2023, SAIDI—411.9052

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation # 8, Index Substation, located on Rt 191 at Index in Morgan County.

Circuit # 2, Index Circuit, this circuit serves areas of Index and Liberty Road.

This circuit has approximately 26.5 miles of line and serves approximately 245 consumers.

This circuit was cut out in 2021-2022.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Planned	29%	31%
Equipment Fail	11%	5%
Animals	2%	

Circuit 5 Year Average SAIFI—1.0899

Reporting Year, 2023, SAIFI—1.2541

Circuit 5 Year Average SAIDI—116.3696

Reporting Year, 2023, SAIDI—143.0658

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Circuit Reporting

Substation # 9, Maytown Substation, located on Rt. 1010 in Morgan County.

Circuit # 3, Pomeroyton Circuit; this circuit serves areas of Rt. 1010, Pine Branch, Landsaw, Long Branch, Pomeroyton and Broke Leg.

This circuit has approximately 63.1 miles of line and serves approximately 411 consumers.

This circuit was cut out in 2014-2015.

Causes and percentages for this circuit:

Cause	% SAIFI	% SAIDI
Planned	61%	63%
Right of Way Out	14%	14%
Unknown	13%	9%
Animals	4%	1%
Consumer Caused	3%	4%
Right of Way Crew	2%	1%

Circuit 5 Year Average SAIFI—1.3739

Reporting Year, 2023, SAIFI—1.7121

Circuit 5 Year Average SAIDI—154.7531

Reporting Year, 2023, SAIDI—328.6605

In order for necessary repairs to be made safely, the power had to be turned off until all repairs were completed.

Vegetation Management Plan

Licking Valley Rural Electric Cooperative Corporation has an aggressive vegetation program and has contracted B M C Contracting to address our cooperatives right-of-way requirements. Our cooperative likes to maintain a sixty (60) foot ground to sky right-of-way clearance on new and existing accounts; however, some variety in right-of-way clearance is based on geography/terrain, line voltages and property owner issues. At this time BMC Contracting is contracted to cut or trim on each side of the lines no less than 20 feet and no more than 30 feet and at least 4 foot below the neutral. Secondary lines have 4-foot swing path cut. If needed another crew is used to take care of call-ins and hot spots.

LVRECC is currently working on a ten (10) year rotation cycle. BMC Contracting has a crew that is cutting each substation by circuit. They also have an hourly crew that cuts hot spots, new right-of-way and consumer reports. Yard trees are dealt with on a case-by-case basis and will be trimmed as much as homeowner will allow (4 foot minimum below our neutral) or taken down if they will agree. In addition to BMC; the cooperative has a bush hog that is used for right-of-way clearing when time allows. The cooperative has a right-of-way foreman that oversees BMC contacting crews. BMC Contracting primarily does our Herbicide Treatment, mostly in the months of May through September. As time allows the cooperative also does some Herbicide Treatment.