

# Electric Distribution Utility Annual Reliability Report

---

## SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Inter-County Energy</u>
REPORT PREPARED BY	1.2	<u>Jessie Turpin</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u><a href="mailto:jessie@intercountyenergy.net">jessie@intercountyenergy.net</a></u>
PHONE NUMBER OF PREPARER	1.4	<u>859-236-4561 ext. 7857</u>

---

## SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2022</u>
-------------------------	-----	-------------

---

## SECTION 3: MAJOR EVENT DAYS

$T_{MED}$	3.1	<u>9.376</u>
FIRST DATE USED TO DETERMINE $T_{MED}$	3.2	<u>Jan. 1, 2017</u>
LAST DATE USED TO DETERMINE $T_{MED}$	3.3	<u>Dec. 31, 2021</u>
NUMBER OF MED IN REPORT YEAR	3.4	<u>2</u>

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>27151</u>	TOTAL CIRCUITS	<u>46</u>
-----------------	--------------	----------------	-----------

### Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>102.25</u>	SAIDI	<u>122.62</u>
SAIFI	<u>1.03</u>	SAIFI	<u>1.35</u>

### Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>345.67</u>	SAIDI	<u>186.76</u>
SAIFI	<u>2.00</u>	SAIFI	<u>1.98</u>

### Notes:

- 1) All duration indices (SAIDI, CAIDI) 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, CAIDI, and  $T_{MED}$

2022

Circuit #1

1. Substation Name and Number	Lancaster (1)
2. Substation Location	Garrard-Buckeye Rd-Lancaster
3. Circuit Name and Number	Lex Road(2)
4. Circuit Location	Lexington Rd, Kember Ln, Fork Church Rd, Danville Hwy, Goggin Ln, Betts Ln, Old Danville Rd
5. Total Circuit Length (Miles)	84.36
6. Customer Count	851
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
	Animals 22.60%
	Lightning 1.33%
	High Wind 0.00%
	Equip. Failure 20.42%
	Deteriorated 2.32%
	Cars or Trucks 47.66%
	Insulation broke 0.00%
	Vegetation/Trees 1.00%
	Trees Cut Into Line 0.69%
	Equipment OL 0.00%
	Rain/ Ice 0.00%
	Cased by Others 3.97%
9. Circuit 5 Year Average (SAIDI)	2.808
10. Reporting Year (SAIDI)	5.278
11. Circuit 5 Year Average (SAIFI)	1.647
12. Reporting Year (SAIFI)	4.893
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #2

1. Substation Name and Number	Ballard (2)
2. Substation Location	Garrard-Fisher Ford Rd-Lancaster
3. Circuit Name and Number	Wells Landing (2)
4. Circuit Location	Wells Landing Rd, Old Bridge, Taylor Rd, Old Lexington Rd
5. Total Circuit Length (Miles)	24.11
6. Customer Count	469
7. Date of Last Circuit Trim	2020
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.73%
Lightning	33.47%
High Wind	21.28%
Equip. Failure	32.97%
Deteriorated	0.00%
Cars or Trucks	0.16%
Insulation broke	0.00%
Vegetation/Trees	4.58%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	6.80%
9. Circuit 5 Year Average (SAIDI)	0.682
10. Reporting Year (SAIDI)	1.383
11. Circuit 5 Year Average (SAIFI)	0.431
12. Reporting Year (SAIFI)	1.128
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #3

1. Substation Name and Number	Ballard (2)
2. Substation Location	Garrard-Fisher Ford Rd-Lancaster
3. Circuit Name and Number	ParadiseCamp(3)
4. Circuit Location	Fisher Ford Rd, Carry Nation Rd, Lake View Point, Sunrise Shore Dr, Paradise Camp Rd, Kennedy Bridge Rd, Bardshaw Ln
5. Total Circuit Length (Miles)	22.4
6. Customer Count	507
7. Date of Last Circuit Trim	2019
8. Outage Cause (% of Total Outage Numbers)	
	Animals 1.53%
	Lightning 0.66%
	High Wind 21.38%
	Equip. Failure 0.79%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 47.62%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 0.38%
	Cased by Others 27.64%
9. Circuit 5 Year Average (SAIDI)	0.922
10. Reporting Year (SAIDI)	3.237
11. Circuit 5 Year Average (SAIFI)	0.512
12. Reporting Year (SAIFI)	1.690
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #4

1. Substation Name and Number	Shelby City(4)
2. Substation Location	Boyle-E Knob Lick Rd-Junction City
3. Circuit Name and Number	Old127Loop(2)
4. Circuit Location	Old127 North Loop, Moores Ln, HWY 1194, Peyton Well Rd
5. Total Circuit Length (Miles)	26.83
6. Customer Count	200
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
Animals	3.81%
Lightning	4.56%
High Wind	49.11%
Equip. Failure	0.00%
Deteriorated	0.00%
Cars or Trucks	10.24%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	27.93%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	4.35%
9. Circuit 5 Year Average (SAIDI)	0.427
10. Reporting Year (SAIDI)	1.275
11. Circuit 5 Year Average (SAIFI)	0.388
12. Reporting Year (SAIFI)	0.990
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #5

1. Substation Name and Number	Shelby City(4)
2. Substation Location	Boyle-E Knob Lick Rd-Junction City
3. Circuit Name and Number	Hustonville(3)
4. Circuit Location	USHWY 127N, KYHWY1194, Jeffries Ln, KY HWY 2141, Harris Creek Rd, Black Pike, Holtzclaw Ln
5. Total Circuit Length (Miles)	57.03
6. Customer Count	1159
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.63%
	Lightning 0.03%
	High Wind 0.04%
	Equip. Failure 96.68%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 0.00%
	Trees Cut Into Line 0.61%
	Equipment OL 0.00%
	Rain/ Ice 0.20%
	Cased by Others 1.81%
9. Circuit 5 Year Average (SAIDI)	1.432
10. Reporting Year (SAIDI)	9.531
11. Circuit 5 Year Average (SAIFI)	0.760
12. Reporting Year (SAIFI)	2.080
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #6

1. Substation Name and Number	Shelby City(4)
2. Substation Location	Boyle-E Knob Lick Rd-Junction City
3. Circuit Name and Number	Alum Springs(4)
4. Circuit Location	W Knob Lick Rd, White Oak Rd, Nosco Rd, Hogue Hollow Rd, Alum Springs Rd, Alum Springs Crosspike, Stewarts Ln
5. Total Circuit Length (Miles)	78.2
6. Customer Count	1199
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.32%
Lightning	35.75%
High Wind	10.47%
Equip. Failure	5.38%
Deteriorated	0.08%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	39.10%
Trees Cut Into Line	0.00%
Equipment OL	0.10%
Rain/ Ice	0.00%
Cased by Others	8.80%
9. Circuit 5 Year Average (SAIDI)	1.128
10. Reporting Year (SAIDI)	3.041
11. Circuit 5 Year Average (SAIFI)	0.777
12. Reporting Year (SAIFI)	2.174
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #7

1. Substation Name and Number	Perryville (6)
2. Substation Location	Boyle-Harrodsburg-Perryville
3. Circuit Name and Number	Harrodsburg(1)
4. Circuit Location	US 68, Quirks Run, Bluegrass Pike
5. Total Circuit Length (Miles)	59.9
6. Customer Count	430
7. Date of Last Circuit Trim	2020
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.90%
Lightning	10.08%
High Wind	23.44%
Equip. Failure	0.44%
Deteriorated	0.00%
Cars or Trucks	0.41%
Insulation broke	0.00%
Vegetation/Trees	11.47%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	53.26%
9. Circuit 5 Year Average (SAIDI)	1.165
10. Reporting Year (SAIDI)	1.709
11. Circuit 5 Year Average (SAIFI)	0.402
12. Reporting Year (SAIFI)	1.340
13. List of Corrective Action, If Any, Taken or To Be Taken	



2022

Circuit #8

1. Substation Name and Number	Perryville (6)
2. Substation Location	Boyle-Harrodsburg-Perryville
3. Circuit Name and Number	Mitchellsburg(2)
4. Circuit Location	Perryville Rd, Godbey Ln, Mitchell Ln, Webster Rd, Harberson Ln, Cash Rd, Lebanon Rd Tank Pond Rd, Johnson Branch Rd, Forkland Rd, Carpenter Creek Rd
5. Total Circuit Length (Miles)	79.64
6. Customer Count	735
7. Date of Last Circuit Trim	
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.26%
	Lightning 1.23%
	High Wind 11.92%
	Equip. Failure 0.32%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 3.52%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 82.21%
	Cased by Others 0.54%
9. Circuit 5 Year Average (SAIDI)	0.700
10. Reporting Year (SAIDI)	4.043
11. Circuit 5 Year Average (SAIFI)	0.313
12. Reporting Year (SAIFI)	1.859
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #9

1. Substation Name and Number	Loretto(8)
2. Substation Location	Marion-Loretto Rd-Lebanon
3. Circuit Name and Number	Holy Cross (4)
4. Circuit Location	St Francis Hwy, Holy Cross Rd, Nerinx Rd, George Edelen Rd, Springtown Rd, Manton Rd, Raley Rd, Beantown Rd, Sam Browning Rd
5. Total Circuit Length (Miles)	65.36
6. Customer Count	547
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	14.66%
Lightning	6.16%
High Wind	0.00%
Equip. Failure	0.84%
Deteriorated	0.00%
Cars or Trucks	0.72%
Insulation broke	0.00%
Vegetation/Trees	5.48%
Trees Cut Into Line	0.00%
Equipment OL	24.70%
Rain/ Ice	0.39%
Cased by Others	47.05%
9. Circuit 5 Year Average (SAIDI)	0.267
10. Reporting Year (SAIDI)	2.128
11. Circuit 5 Year Average (SAIFI)	0.316
12. Reporting Year (SAIFI)	1.138
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #10

1. Substation Name and Number	Sulpher Ck.(9)
2. Substation Location	Nelson-Gap Knob Rd-New Hope
3. Circuit Name and Number	Howardstown(2)
4. Circuit Location	Stiles Rd, Scott Rd, Howardstown Rd, Walter Hall Rd
5. Total Circuit Length (Miles)	54.48
6. Customer Count	295
7. Date of Last Circuit Trim	2018
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.08%
	Lightning 26.84%
	High Wind 0.00%
	Equip. Failure 0.00%
	Deteriorated 0.92%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 10.78%
	Trees Cut Into Line 57.30%
	Equipment OL 0.00%
	Rain/ Ice 2.92%
	Cased by Others 1.15%
9. Circuit 5 Year Average (SAIDI)	2.805
10. Reporting Year (SAIDI)	10.335
11. Circuit 5 Year Average (SAIFI)	1.685
12. Reporting Year (SAIFI)	4.363
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #11

1. Substation Name and Number	H.T. Adams (10)
2. Substation Location	Mercer-DryBranchRd-Harrodsburg
3. Circuit Name and Number	Harrodsburg(1)
4. Circuit Location	Dry Branch Rd, Kyle Ln, Sparrow Ln, Danville Rd, Beaumont Ave, Bud James Ln, Bellows Mill Rd, Mercer Ave, Boyle Ave, Adams Ln, Brightleaf Dr, Cold Springs Dr
5. Total Circuit Length (Miles)	40.75
6. Customer Count	611
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
	Animals 2.46%
	Lightning 2.22%
	High Wind 1.82%
	Equip. Failure 1.46%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 52.80%
	Trees Cut Into Line 0.00%
	Equipment OL 12.67%
	Rain/ Ice 0.00%
	Cased by Others 26.57%
9. Circuit 5 Year Average (SAIDI)	0.539
10. Reporting Year (SAIDI)	2.297
11. Circuit 5 Year Average (SAIFI)	0.821
12. Reporting Year (SAIFI)	1.403
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #12

1. Substation Name and Number	Marion Industrial(12)
2. Substation Location	Marion-Industrial Dr-Lebanon
3. Circuit Name and Number	Ky Hwy 208(1)
4. Circuit Location	New Calvery Rd, Lovers Ln, Millers Pike, Campbellsville Hwy, McElroy Pike, Wards Branch Rd
5. Total Circuit Length (Miles)	66.81
6. Customer Count	1101
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	3.11%
Lightning	27.79%
High Wind	0.62%
Equip. Failure	26.89%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.44%
Vegetation/Trees	0.00%
Trees Cut Into Line	5.48%
Equipment OL	0.16%
Rain/ Ice	0.16%
Cased by Others	35.35%
9. Circuit 5 Year Average (SAIDI)	0.250
10. Reporting Year (SAIDI)	2.229
11. Circuit 5 Year Average (SAIFI)	0.381
12. Reporting Year (SAIFI)	1.269
13. List of Corrective Action, If Any, Taken or To Be Taken	

2022

Circuit #13

1. Substation Name and Number	Garrard(13)
2. Substation Location	Garrard-Enterprise Dr-Lancaster
3. Circuit Name and Number	Paintlick(1)
4. Circuit Location	Richmond Rd, Sunrise Dr, Richmond Rd Loop 1, Kirksville Rd, Perry Rogers Rd, Poor House Rd, Hurt Ln, Kelly Ridge Rd, Maupin Rd, Gooch Pike, Gaffney Rd, Walker Pike, Brock Rd, Old Railroad Grade Rd, Gillespie Pike, Broad
5. Total Circuit Length (Miles)	88.86
6. Customer Count	783
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
	Animals 24.08%
	Lightning 1.25%
	High Wind 0.21%
	Equip. Failure 7.70%
	Deteriorated 0.00%
	Cars or Trucks 2.75%
	Insulation broke 0.54%
	Vegetation/Trees 4.72%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 57.69%
	Cased by Others 1.04%
9. Circuit 5 Year Average (SAIDI)	0.750
10. Reporting Year (SAIDI)	6.303
11. Circuit 5 Year Average (SAIFI)	0.430
12. Reporting Year (SAIFI)	3.609
13. List of Corrective Action, If Any, Taken or To Be Taken	

# Electric Distribution Utility Annual Reliability Report

---

Additional pages may be attached as necessary  
SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

Inter-County Energy has restarting a new 6 year cycle and will be closely monitoring the results of the cycle progress.

---

SECTION 7: UTILITY COMMENTS

---