

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>David Phelps</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u>Davidp@intercountyenergy.net</u>
PHONE NUMBER OF PREPARER	1.4	<u>(859)236-7813</u>

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2023</u>
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SECTION 3: MAJOR EVENT DAYS

T_{MED}	3.1	<u>10.077</u>
FIRST DATE USED TO DETERMINE T_{MED}	3.2	<u>Jan. 1, 2018</u>
LAST DATE USED TO DETERMINE T_{MED}	3.3	<u>Dec. 31, 2022</u>
NUMBER OF MED IN REPORT YEAR	3.4	<u>1</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>27810</u>	TOTAL CIRCUITS	<u>47</u>
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Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>101.87</u>	SAIDI	<u>100.60</u>
SAIFI	<u>1.06</u>	SAIFI	<u>0.98</u>

Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>271.33</u>	SAIDI	<u>162.98</u>
SAIFI	<u>1.81</u>	SAIFI	<u>1.33</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}

2023

Circuit #1

1. Substation Name and Number	Lancaster (1)
2. Substation Location	1442 Lexington Rd, Lancaster
3. Circuit Name and Number	Danville Rd(3)
4. Circuit Location	Lexington Rd, Sugar Creek Rd

5. Total Circuit Length (Miles)	49.43
6. Customer Count	279
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
Animals	5.14%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	8.71%
Deteriorated	0.00%
Cars or Trucks	82.76%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	3.39%

9. Circuit 5 Year Average (SAIDI)	0.000
10. Reporting Year (SAIDI)	5.700
11. Circuit 5 Year Average (SAIFI)	0.000
12. Reporting Year (SAIFI)	0.000
13. List of Corrective Action, If Any, Taken or To Be Taken	

New Circuit out of the Substation

2023

Circuit #2

1. Substation Name and Number	Shelby City
2. Substation Location	224 East Knob Lick Rd
3. Circuit Name and Number	Alum Springs(4)
4. Circuit Location	Knob Lick Rd, Hwy 300, Alum Springs Rd, Stewarts Ln
5. Total Circuit Length (Miles)	79.47
6. Customer Count	1202
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	16.01%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	6.61%
Deteriorated	0.00%
Cars or Trucks	17.02%
Insulation broke	0.00%
Vegetation/Trees	46.74%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	13.62%
9. Circuit 5 Year Average (SAIDI)	45.480
10. Reporting Year (SAIDI)	251.340
11. Circuit 5 Year Average (SAIFI)	1.124
12. Reporting Year (SAIFI)	5.540
13. List of Corrective Action, If Any, Taken or To Be Taken	

2023

Circuit #3

1. Substation Name and Number	Perryville(6)
2. Substation Location	590 Harrodsburg Rd, Perryville
3. Circuit Name and Number	Battlefield(4)
4. Circuit Location	Ky Hwy 1920, Battlefield Rd.

5. Total Circuit Length (Miles)	55.09
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6. Customer Count	346
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7. Date of Last Circuit Trim	2019
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8. Outage Cause (% of Total Outage Numbers)	
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Animals	2.97%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	0.31%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	79.38%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	17.34%

9. Circuit 5 Year Average (SAIDI)	46.320
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10. Reporting Year (SAIDI)	104.040
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11. Circuit 5 Year Average (SAIFI)	0.290
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12. Reporting Year (SAIFI)	1.315
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13. List of Corrective Action, If Any, Taken or To Be Taken	
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2023

Circuit #4

1. Substation Name and Number	Loretto (8)
2. Substation Location	6483 Loretto Rd. Lebanon, Ky.
3. Circuit Name and Number	Holy Cross(4)
4. Circuit Location	Holy Cross Rd, Hwy 52, Hwy 152
5. Total Circuit Length (Miles)	65.44
6. Customer Count	537
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.92%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	77.28%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	11.98%
Trees Cut Into Line	2.60%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	7.21%
9. Circuit 5 Year Average (SAIDI)	34.740
10. Reporting Year (SAIDI)	153.240
11. Circuit 5 Year Average (SAIFI)	0.669
12. Reporting Year (SAIFI)	2.371
13. List of Corrective Action, If Any, Taken or To Be Taken	

2023

Circuit #5

1. Substation Name and Number	Garrard (13)
2. Substation Location	489 Richmond Rd., Lancaster, Ky.
3. Circuit Name and Number	Paintlick (1)
4. Circuit Location	Hwy 52, Hwy 954

5. Total Circuit Length (Miles)	89.43
6. Customer Count	790
7. Date of Last Circuit Trim	2022

8. Outage Cause (% of Total Outage Numbers)	
Animals	20.27%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	45.61%
Deteriorated	0.00%
Cars or Trucks	0.31%
Insulation broke	0.00%
Vegetation/Trees	0.69%
Trees Cut Into Line	0.01%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	33.10%

9. Circuit 5 Year Average (SAIDI)	112.080
10. Reporting Year (SAIDI)	496.366
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	

2023

Circuit #6

1. Substation Name and Number	Garrard (13)
2. Substation Location	489 Richmond Rd., Lancaster, Ky.
3. Circuit Name and Number	Gilberts Creek (2)
4. Circuit Location	Hwy 52, Hwy 1972
5. Total Circuit Length (Miles)	31.25
6. Customer Count	375
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
Animals	61.27%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	0.00%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	2.49%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	36.24%
9. Circuit 5 Year Average (SAIDI)	112.060
10. Reporting Year (SAIDI)	166.496
11. Circuit 5 Year Average (SAIFI)	0.318
12. Reporting Year (SAIFI)	1.549
13. List of Corrective Action, If Any, Taken or To Be Taken	

2023

Circuit #7

1. Substation Name and Number	Broughtontown (16)
2. Substation Location	7400 Ky Hwy 643
3. Circuit Name and Number	Hwy 150 (1)
4. Circuit Location	Hwy 643, Hwy 150

5. Total Circuit Length (Miles) 88.47

6. Customer Count 776

7. Date of Last Circuit Trim 2022

8. Outage Cause (% of Total Outage Numbers)

Animals	5.23%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	2.05%
Deteriorated	0.06%
Cars or Trucks	61.34%
Insulation broke	0.00%
Vegetation/Trees	30.84%
Trees Cut Into Line	0.36%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	0.11%

9. Circuit 5 Year Average (SAIDI) 8.526

10. Reporting Year (SAIDI) 224.020

11. Circuit 5 Year Average (SAIFI) 0.037

12. Reporting Year (SAIFI) 2.188

13. List of Corrective Action, If Any, Taken or To Be Taken

2023

Circuit #8

1. Substation Name and Number	Broughtontown (16)
2. Substation Location	7400 Ky Hwy 643
3. Circuit Name and Number	Hwy 27 (3)
4. Circuit Location	Hwy. 643, Hwy. 1781, Hwy. 39

5. Total Circuit Length (Miles)	80.15
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6. Customer Count	664
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7. Date of Last Circuit Trim	
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8. Outage Cause (% of Total Outage Numbers)	
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Animals	0.12%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	0.11%
Deteriorated	0.00%
Cars or Trucks	28.33%
Insulation broke	0.00%
Vegetation/Trees	53.61%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	17.84%

9. Circuit 5 Year Average (SAIDI)	84.868
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10. Reporting Year (SAIDI)	443.485
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11. Circuit 5 Year Average (SAIFI)	0.318
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12. Reporting Year (SAIFI)	4.081
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13. List of Corrective Action, If Any, Taken or To Be Taken	
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Additional pages may be attached as necessary
SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

Inter-County Energy does a 6 year cycle cut with two year cycle spray program.

SECTION 7: UTILITY COMMENTS


