

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>2024</u>
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SECTION 3: MAJOR EVENT DAYS

T_{MED}	3.1	<u>7.223</u>
FIRST DATE USED TO DETERMINE T_{MED}	3.2	<u>1-Jan-20</u>
LAST DATE USED TO DETERMINE T_{MED}	3.3	<u>31-Dec-24</u>
NUMBER OF MED IN REPORT YEAR	3.4	<u>7</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>28151</u>	TOTAL CIRCUITS	<u>48</u>
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Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>105.63</u>	SAIDI	<u>116.93</u>
SAIFI	<u>1.10</u>	SAIFI	<u>1.17</u>

Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>299.57</u>	SAIDI	<u>276.66</u>
SAIFI	<u>1.87</u>	SAIFI	<u>1.91</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}

2024

Circuit #1

1. Substation Name and Number	Ballard 2
2. Substation Location	2090 Fisher Ford Rd, Lancaster
3. Circuit Name and Number	Toddville 1
4. Circuit Location	Sutton Ln. / Tanyard Branch Rd
5. Total Circuit Length (Miles)	16.6
6. Customer Count	388
7. Date of Last Circuit Trim	2020
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.13%
Lightning	0.00%
High Wind	0.00%
Equip. Failure	5.92%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	76.41%
Vegetation/Trees	0.51%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	0.559
10. Reporting Year (SAIDI)	3.909
11. Circuit 5 Year Average (SAIFI)	0.328
12. Reporting Year (SAIFI)	1.573
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #2

1. Substation Name and Number	Broughtontown 16
2. Substation Location	7400 Ky Hwy 643, Stanford
3. Circuit Name and Number	Hwy 150 #1
4. Circuit Location	Hwy 643 / Ky Hwy 150
5. Total Circuit Length (Miles)	109
6. Customer Count	785
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
Animals	1.04%
Lightning	0.00%
High Wind	0.88%
Equip. Failure	0.05%
Deteriorated	0.00%
Cars or Trucks	0.02%
Insulation broke	0.00%
Vegetation/Trees	59.95%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.40%
9. Circuit 5 Year Average (SAIDI)	1.339
10. Reporting Year (SAIDI)	5.312
11. Circuit 5 Year Average (SAIFI)	0.474
12. Reporting Year (SAIFI)	2.155
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #3

1. Substation Name and Number	Broughtontown #16
2. Substation Location	7400 Ky Hwy 643, Stanford
3. Circuit Name and Number	Hwy 1781 #2
4. Circuit Location	Hwy 1781 / Hwy 39
5. Total Circuit Length (Miles)	56.4
6. Customer Count	429
7. Date of Last Circuit Trim	2024
8. Outage Cause (% of Total Outage Numbers)	
Animals	6.80%
Lightning	0.00%
High Wind	34.73%
Equip. Failure	0.95%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	2.49%
Trees Cut Into Line	16.21%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	11.25%
9. Circuit 5 Year Average (SAIDI)	0.000
10. Reporting Year (SAIDI)	1.252
11. Circuit 5 Year Average (SAIFI)	0.000
12. Reporting Year (SAIFI)	0.898
13. List of Corrective Action, If Any, Taken or To Be Taken	
New Feeder with no history out of substation	

2024

Circuit #4

1. Substation Name and Number	Gooch #11
2. Substation Location	709 Rice Lane, Stanford
3. Circuit Name and Number	Lancaster #4
4. Circuit Location	Hwy 150 / Hwy 27
5. Total Circuit Length (Miles)	64.7
6. Customer Count	824
7. Date of Last Circuit Trim	2023
8. Outage Cause (% of Total Outage Numbers)	
Animals	6.84%
Lightning	0.00%
High Wind	7.21%
Equip. Failure	2.35%
Deteriorated	0.80%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	0.380
10. Reporting Year (SAIDI)	1.053
11. Circuit 5 Year Average (SAIFI)	0.457
12. Reporting Year (SAIFI)	1.168
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #5

1. Substation Name and Number	Lancaster #1
2. Substation Location	1512 Hwy 27, Lancaster, Ky
3. Circuit Name and Number	Danville #3
4. Circuit Location	Hwy 27 / Hwy 52
5. Total Circuit Length (Miles)	63.71
6. Customer Count	508
7. Date of Last Circuit Trim	2022
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.32%
Lightning	0.00%
High Wind	7.37%
Equip. Failure	0.20%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.43%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	0.047
10. Reporting Year (SAIDI)	3.817
11. Circuit 5 Year Average (SAIFI)	0.016
12. Reporting Year (SAIFI)	0.185
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #6

1. Substation Name and Number	Lebanon #7
2. Substation Location	389 L. Harrison St, Lebanon, Ky
3. Circuit Name and Number	Danville #1
4. Circuit Location	Hwy 68

5. Total Circuit Length (Miles)	216
6. Customer Count	1448
7. Date of Last Circuit Trim	2020

8. Outage Cause (% of Total Outage Numbers)	
Animals	1.39%
Lightning	0.00%
High Wind	11.34%
Equip. Failure	0.74%
Deteriorated	0.04%
Cars or Trucks	1.50%
Insulation broke	0.02%
Vegetation/Trees	56.55%
Trees Cut Into Line	0.00%
Equipment OL	0.16%
Rain/ Ice	0.00%
Caused by Others	0.00%

9. Circuit 5 Year Average (SAIDI)	1.110
10. Reporting Year (SAIDI)	3.404
11. Circuit 5 Year Average (SAIFI)	0.924
12. Reporting Year (SAIFI)	1.614

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

2024

Circuit #7

1. Substation Name and Number	Marion Industrial #12
2. Substation Location	745 Industrial Dr., Lebanon, Ky
3. Circuit Name and Number	Ky Hwy 208 #1
4. Circuit Location	Industry Drive / Hwy 208
5. Total Circuit Length (Miles)	92.7
6. Customer Count	1071
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	3.05%
Lightning	0.00%
High Wind	25.68%
Equip. Failure	0.00%
Deteriorated	0.65%
Cars or Trucks	0.03%
Insulation broke	0.00%
Vegetation/Trees	23.14%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	0.618
10. Reporting Year (SAIDI)	1.190
11. Circuit 5 Year Average (SAIFI)	0.434
12. Reporting Year (SAIFI)	1.429
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #8

1. Substation Name and Number	Perryville #6
2. Substation Location	590 Harrodsburg Rd, Perryville, Ky
3. Circuit Name and Number	Battlefield #4
4. Circuit Location	Hwy 1920
5. Total Circuit Length (Miles)	65.7
6. Customer Count	368
7. Date of Last Circuit Trim	2019
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.24%
Lightning	0.00%
High Wind	82.92%
Equip. Failure	0.00%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	8.29%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	0.792
10. Reporting Year (SAIDI)	3.790
11. Circuit 5 Year Average (SAIFI)	0.455
12. Reporting Year (SAIFI)	1.180
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #9

1. Substation Name and Number	Peyton #5
2. Substation Location	4210 Hwy 78, Hustonville, Ky
3. Circuit Name and Number	Little South #2
4. Circuit Location	Hwy 78 / Hwy 49

5. Total Circuit Length (Miles)	51.3
6. Customer Count	211
7. Date of Last Circuit Trim	2019

8. Outage Cause (% of Total Outage Numbers)	
Animals	0.06%
Lightning	0.00%
High Wind	27.23%
Equip. Failure	0.03%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	35.53%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%

9. Circuit 5 Year Average (SAIDI)	1.758
10. Reporting Year (SAIDI)	10.199
11. Circuit 5 Year Average (SAIFI)	0.755
12. Reporting Year (SAIFI)	3.473

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

2024

Circuit #10

1. Substation Name and Number	Peyton #5
2. Substation Location	4210 Hwy 78, Hustonville, Ky
3. Circuit Name and Number	Hustonville #3
4. Circuit Location	Hwy 78 / Hwy 127
5. Total Circuit Length (Miles)	156
6. Customer Count	969
7. Date of Last Circuit Trim	2021
8. Outage Cause (% of Total Outage Numbers)	
Animals	3.20%
Lightning	0.00%
High Wind	69.22%
Equip. Failure	0.06%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	23.88%
Trees Cut Into Line	0.02%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%
9. Circuit 5 Year Average (SAIDI)	1.740
10. Reporting Year (SAIDI)	3.845
11. Circuit 5 Year Average (SAIFI)	0.772
12. Reporting Year (SAIFI)	1.864
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #11

1. Substation Name and Number	Sulpher Creek #9
2. Substation Location	5143 Gap Knob Rd, New Hope, Ky
3. Circuit Name and Number	New Hope #3
4. Circuit Location	Hwy 457
5. Total Circuit Length (Miles)	37.6
6. Customer Count	238
7. Date of Last Circuit Trim	2024
8. Outage Cause (% of Total Outage Numbers)	
Animals	5.12%
Lightning	0.00%
High Wind	29.37%
Equip. Failure	0.00%
Deteriorated	0.00%
Cars or Trucks	8.06%
Insulation broke	0.00%
Vegetation/Trees	357.22%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.79%
9. Circuit 5 Year Average (SAIDI)	1.304
10. Reporting Year (SAIDI)	3.216
11. Circuit 5 Year Average (SAIFI)	0.539
12. Reporting Year (SAIFI)	1.951
13. List of Corrective Action, If Any, Taken or To Be Taken	

2024

Circuit #12

1. Substation Name and Number	Toddville #14
2. Substation Location	183 Dairy Way, Lancaster, Ky
3. Circuit Name and Number	Bourne #2
4. Circuit Location	Mt. Hebron Rd / Thompson Rd.

5. Total Circuit Length (Miles)	58.1
6. Customer Count	503
7. Date of Last Circuit Trim	2020

8. Outage Cause (% of Total Outage Numbers)	
Animals	3.84%
Lightning	0.00%
High Wind	18.26%
Equip. Failure	38.29%
Deteriorated	2.17%
Cars or Trucks	3.71%
Insulation broke	0.00%
Vegetation/Trees	30.88%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Caused by Others	0.00%

9. Circuit 5 Year Average (SAIDI)	1.026
10. Reporting Year (SAIDI)	2.113
11. Circuit 5 Year Average (SAIFI)	0.823
12. Reporting Year (SAIFI)	2.320

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 does a 6 year cycle cut with two year cycle spray program.

SECTION 7: UTILITY COMMENTS
