

  
**INTER COUNTY**  
ENERGY COOPERATIVE

A Touchstone Energy Cooperative 

RECEIVED

APR 27 2015

PUBLIC SERVICE  
COMMISSION

April 23, 2015

Mr. Jeff Derouen  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40602


**Re: ADMINISTRATIVE CASE NO. 2011-00450  
AN INVESTIGATION OF THE RELIABILITY MEASURES OF KENTUCKY'S  
JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITIES**

Dear Mr. Derouen:

Enclosed is the Electric Distribution Utility Annual Reliability Report for Inter-County Energy Cooperative pursuant to the Public Service Commission Administrative Case No. 2011-00450 dated April 1, 2014.

If you have further questions or comments, please direct those to David Phelps, Vice President-Operations. His direct line is 859-936-7818 or email to [davidp@intercountyenergy.net](mailto:davidp@intercountyenergy.net).

Sincerely,



James L. Jacobus  
President/CEO

Copy To: Mr. Kyle Willard, Director of Engineering, KY Public Service Commission



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## **Administrative Case No. 2011-00450**

**April 23, 2015**

### **Electric Distribution Utility Annual Reliability Report**

- Contact Information
- Report Year
- Major Event Days
- System Reliability Information and Results
- Circuit Reporting
- Vegetation Management Plan Review
- Utility Comments

# 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>859-236-4561 ext. 7818</u>

## SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2014</u>
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## SECTION 3: MAJOR EVENT DAYS

	$T_{MED}$	3.1	<u>12.85091</u>
FIRST DATE USED TO DETERMINE $T_{MED}$		3.2	<u>Jan. 1, 2009</u>
LAST DATE USED TO DETERMINE $T_{MED}$		3.3	<u>Dec. 31, 2013</u>
NUMBER OF MED IN REPORT YEAR		3.4	<u>6</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>26121</u>	TOTAL CIRCUITS	<u>42</u>
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### Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>103.23</u>	SAIDI	<u>109.97</u>
SAIFI	<u>1.23</u>	SAIFI	<u>1.18</u>

### Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>2715.66</u>	SAIDI	<u>582.15</u>
SAIFI	<u>2.11</u>	SAIFI	<u>2.73</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  $T_{MED}$

Section 5: Circuit Reporting

2014

Circuit #1

1. Substation Name and Number	Lancaster (1)
2. Substation Location	Garrard-Buckeye Rd-Lancaster
3. Circuit Name and Number	Old Hwy 52 (3)
4. Circuit Location	Curtis Ln, Conns Ln, Deer Haven Ln, Hale Ln
5. Total Circuit Length (Miles)	4.02
6. Customer Count	21
7. Date of Last Circuit Trim	May-10
8. Outage Cause (% of Total Outage Numbers)	
	Animals 100.00%
	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 0.00%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 0.00%
	Cased by Others 0.00%
9. Circuit 5 Year Average (SAIDI)	0
10. Reporting Year (SAIDI)	0.034920635
11. Circuit 5 Year Average (SAIFI)	0
12. Reporting Year (SAIFI)	0.047619048
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	None

2014

Circuit #2

1. Substation Name and Number	Lancaster (1)
2. Substation Location	Garrard-Buckeye Rd-Lancaster
3. Circuit Name and Number	Conns Ln (4)
4. Circuit Location	Conns Ln, Miller Ave, Eastland Acres, Richmond Road Loop 1
5. Total Circuit Length (Miles)	5.61
6. Customer Count	79
7. Date of Last Circuit Trim	May-10
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.00%
Lightning	0.00%
High Wind	50.00%
Equip. Failure	0.00%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	0.00%
Cased by Others	50.00%
9. Circuit 5 Year Average (SAIDI)	0
10. Reporting Year (SAIDI)	0.03164557
11. Circuit 5 Year Average (SAIFI)	0
12. Reporting Year (SAIFI)	0.025316456
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	None

2014

Circuit #3

1. Substation Name and Number	Ballard (2)
2. Substation Location	Lincoln-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)	23.6
6. Customer Count	486
7. Date of Last Circuit Trim	Feb-10
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.11%
	Lightning 1.92%
	High Wind 91.39%
	Equip. Failure 0.00%
	Deteriorated 0.22%
	Cars or Trucks 0.32%
	Insulation broke 0.00%
	Vegetation/Trees 3.28%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 0.00%
	Cased by Others 2.76%
9. Circuit 5 Year Average (SAIDI)	0.899500389
10. Reporting Year (SAIDI)	2.306207133
11. Circuit 5 Year Average (SAIFI)	0.594899501
12. Reporting Year (SAIFI)	1.074074074
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	None

2014

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	Junkyard (3)
4. Circuit Location	US Hwy 127 N, Troy Ave, Arcadia View Dr, Bowens Rd, Moores Ln, KY Hwy 1194, Jeffries Ln
5. Total Circuit Length (Miles)	57.61
6. Customer Count	1149
7. Date of Last Circuit Trim	Oct-13
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.00%
	Lightning 11.28%
	High Wind 0.00%
	Equip. Failure 5.91%
	Deteriorated 55.05%
	Cars or Trucks 0.41%
	Insulation broke 0.00%
	Vegetation/Trees 0.40%
	Trees Cut Into Line 0.00%
	Equipment OL 1.84%
	Rain/ Ice 12.16%
	Cased by Others 12.94%
9. Circuit 5 Year Average (SAIDI)	0.373979337
10. Reporting Year (SAIDI)	1.112097476
11. Circuit 5 Year Average (SAIFI)	0.868132728
12. Reporting Year (SAIFI)	1.514360313
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	348 (2017)
Black Pike-Convert 1ph to 3ph, 1/0AAAC	

2014

Circuit #5

1. Substation Name and Number	Peyton Store (5)
2. Substation Location	Casey-Hwy 78-Houstonville
3. Circuit Name and Number	Little South (2)
4. Circuit Location	KY 243, Maxey Valley Rd, Black Lick Rd, Bob Curtis Rd, Kedron Rd, Buffalo Rd
5. Total Circuit Length (Miles)	43.23
6. Customer Count	210
7. Date of Last Circuit Trim	Oct-13
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.00%
	Lightning 0.10%
	High Wind 14.11%
	Equip. Failure 16.08%
	Deteriorated 0.00%
	Cars or Trucks 68.39%
	Insulation broke 0.19%
	Vegetation/Trees 0.13%
	Trees Cut Into Line 1.01%
	Equipment OL 0.00%
	Rain/ Ice 0.00%
	Cased by Others 0.00%
9. Circuit 5 Year Average (SAIDI)	1.102635926
10. Reporting Year (SAIDI)	17.66896825
11. Circuit 5 Year Average (SAIFI)	0.336357468
12. Reporting Year (SAIFI)	5.042857143
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	339 (2015), 340 (2015), 343 (205)
Hwy 243-Convert 2ph to 3ph, 4/0ACSR	
Hwy 243-Convert 1ph to 3ph, 4/0ACSR	
Hwy 78/Maxey Valley-Convert to 3ph 1/0AAAC	



2014

Circuit #6

1. Substation Name and Number	Gooch(11)
2. Substation Location	Lincoln-Rice Ln-Stanford
3. Circuit Name and Number	Fairgrounds (5)
4. Circuit Location	KY Hwy 1247, Old Ottenheim Rd, US Hwy 27 S, Maywood Rd, KY Hwy 3249, KY Hwy 643
5. Total Circuit Length (Miles)	62.02
6. Customer Count	881
7. Date of Last Circuit Trim	Aug-14
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.45%
Lightning	0.08%
High Wind	21.85%
Equip. Failure	2.81%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	56.71%
Trees Cut Into Line	0.55%
Equipment OL	0.15%
Rain/ Ice	16.41%
Cased by Others	0.98%
9. Circuit 5 Year Average (SAIDI)	1.23657552
10. Reporting Year (SAIDI)	4.732387439
11. Circuit 5 Year Average (SAIFI)	0.934987878
12. Reporting Year (SAIFI)	2.631101022
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	

2014

Circuit #7

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)	64.89
6. Customer Count	895
7. Date of Last Circuit Trim	Feb-11
8. Outage Cause (% of Total Outage Numbers)	
	Animals 1.57%
	Lightning 23.29%
	High Wind 0.00%
	Equip. Failure 0.38%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 0.00%
	Trees Cut Into Line 0.00%
	Equipment OL 52.83%
	Rain/ Ice 0.00%
	Cased by Others 21.93%
9. Circuit 5 Year Average (SAIDI)	1.255628677
10. Reporting Year (SAIDI)	0.992495344
11. Circuit 5 Year Average (SAIFI)	0.58093138
12. Reporting Year (SAIFI)	2.36424581
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	332 (2017)
Miller Pike-Replace 1ph-#4ACSR with 1ph-1/0AAAC	

2014

Circuit #8

1. Substation Name and Number	Toddsville (14)
2. Substation Location	Garrard-Kennedy Bridge Rd-Toddsville
3. Circuit Name and Number	WDKY (1)
4. Circuit Location	Kennedy Bridge Rd, Tuggle Rd, Rogers Rd, Polly Bend Rd, High Bridge Rd, Donmar Dr, Hunter Dr
5. Total Circuit Length (Miles)	47.18
6. Customer Count	467
7. Date of Last Circuit Trim	May-12
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.87%
	Lightning 1.49%
	High Wind 0.00%
	Equip. Failure 1.08%
	Deteriorated 0.00%
	Cars or Trucks 0.68%
	Insulation broke 0.00%
	Vegetation/Trees 4.30%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 91.58%
	Cased by Others 0.00%
9. Circuit 5 Year Average (SAIDI)	1.102313744
10. Reporting Year (SAIDI)	4.979371877
11. Circuit 5 Year Average (SAIFI)	0.738699359
12. Reporting Year (SAIFI)	1.366167024
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	353 (2017), 354 (2016), 355 (2016)
Ridge Runner Subd-Convert 1ph to 2ph, 1/0AAAC	
High Bridge Rd-Convert 1ph to 3ph, 1/0AAAC	
High Bridge Rd-Convert 1ph to 2ph-1/0AAAC	

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# Electric Distribution Utility Annual Reliability Report

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

Inter-County Energy completed the second year of its 5 year vegetation management plan. Inter-County Energy is closely monitoring the results of the second year of our second cycle.

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## SECTION 7: UTILITY COMMENTS

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