



RECEIVED

APR 12 2019

PUBLIC SERVICE
COMMISSION

April 11, 2019

Ms. Gwen R. Pinson
Executive Director
Kentucky Public Service Commission
P. O. Box 615
Frankfort, KY 40602-0615

**Re: ADMINISTRATIVE CASE NO. 2006-00494
AN INVESTIGATION OF THE RELIABILITY MEASURES OF KENTUCKY'S
JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITIES AND CERTAIN
RELIABILITY MAINTENANCE PRACTICES**

Dear Ms. Pinson:

Enclosed is Inter-County Energy Cooperative's Annual Report of Reliability pursuant to Public Service Commission Case No. 2006-00494 dated October 26, 2007.

If you have further questions or comments, please direct those to David Phelps, Vice President-Operations, 859-936-7818, davidp@intercountyenergy.net or to Jessie Turpin, System Engineer, 859-936-7857, jessie@intercountyenergy.net.

Sincerely,

A handwritten signature in blue ink that reads "Jerry W. Carter".

Jerry W. Carter
President/CEO

This institution is an equal opportunity provider and employer.

APR 12 2019

Electric Distribution Utility Annual Reliability Report

PUBLIC SERVICE
COMMISSION

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>jessie@intercountyenergy.net</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>2018</u>
-------------------------	-----	-------------

SECTION 3: MAJOR EVENT DAYS

	T_{MED}	3.1	<u>10.61887921</u>
FIRST DATE USED TO DETERMINE T_{MED}		3.2	<u>Jan. 1, 2013</u>
LAST DATE USED TO DETERMINE T_{MED}		3.3	<u>Dec. 31, 2017</u>
NUMBER OF MED IN REPORT YEAR		3.4	<u>4</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>26418</u>	TOTAL CIRCUITS	<u>43</u>
-----------------	--------------	----------------	-----------

Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>94.82</u>	SAIDI	<u>123.34</u>
SAIFI	<u>1.05</u>	SAIFI	<u>1.14</u>

Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>261.45</u>	SAIDI	<u>545.54</u>
SAIFI	<u>1.70</u>	SAIFI	<u>2.26</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}

2018

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	Conns Ln, Curtis Ln, Deer Haven Ln, Hale Ln
5. Total Circuit Length (Miles)	4.01
6. Customer Count	19
7. Date of Last Circuit Trim	May-10
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.00%
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	100.00%
9. Circuit 5 Year Average (SAIDI)	0.118738513
10. Reporting Year (SAIDI)	1.765789474
11. Circuit 5 Year Average (SAIFI)	0.08320802
12. Reporting Year (SAIFI)	1.052631579
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #2

1. Substation Name and Number	Lancaster (1)
2. Substation Location	Garrard-Buckeye Rd-Lancaster
3. Circuit Name and Number	ConnsLn(4)
4. Circuit Location	Conns Ln, Miller Ave, Eastland Acres, Richmond Road Loop 1
5. Total Circuit Length (Miles)	5.59
6. Customer Count	81
7. Date of Last Circuit Trim	Jan-17
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.00%
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	17.07%
Cased by Others	82.93%
9. Circuit 5 Year Average (SAIDI)	0.359322257
10. Reporting Year (SAIDI)	1.866872428
11. Circuit 5 Year Average (SAIFI)	0.259367089
12. Reporting Year (SAIFI)	1.037037037
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #3

1. Substation Name and Number	Highland (3)
2. Substation Location	Lincoln-GreasyRdgRd-Stanford
3. Circuit Name and Number	Green River (3)
4. Circuit Location	Greasy Ridge Rd, Good Paster Rd, KyHwy 698, Martins Trail Spice Ridge, Peck Hollow, Hwy 198, Mt Salem Rd, Short Pike, Indian Creek, Angel Ridge Rd
5. Total Circuit Length (Miles)	134.4
6. Customer Count	1020
7. Date of Last Circuit Trim	Apr-17
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.16%
	Lightning 1.35%
	High Wind 16.21%
	Equip. Failure 29.07%
	Deteriorated 0.19%
	Cars or Trucks 0.11%
	Insulation broke 0.00%
	Vegetation/Trees 27.98%
	Trees Cut Into Line 0.61%
	Equipment OL 0.00%
	Rain/ Ice 23.82%
	Cased by Others 0.50%
9. Circuit 5 Year Average (SAIDI)	1.989207301
10. Reporting Year (SAIDI)	5.07256536
11. Circuit 5 Year Average (SAIFI)	1.445922817
12. Reporting Year (SAIFI)	2.598039216
13. List of Corrective Action, If Any, Taken or To Be Taken	
2018-2021 Work Plan Actions To Be Taken:	
CFR 307 Martins Trail	

2018

Circuit #4

1. Substation Name and Number	Peyton Store (5)
2. Substation Location	Casey-Hwy 78-Hustonville
3. Circuit Name and Number	Jacktown (1)
4. Circuit Location	Hwy 78, Hwy 49, Martins Creek, Hwy 1547, Peyton Ridge Rd, Griffith Rdg Rd, Caney Fork Rd, Snake Rdg Rd, Reynolds Crk, Wilson Rdg Rd, Lower Brush Crk
5. Total Circuit Length (Miles)	140.59
6. Customer Count	971
7. Date of Last Circuit Trim	Dec-18
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.46%
Lightning	6.43%
High Wind	20.52%
Equip. Failure	4.19%
Deteriorated	0.03%
Cars or Trucks	18.99%
Insulation broke	0.00%
Vegetation/Trees	32.90%
Trees Cut Into Line	0.15%
Equipment OL	0.00%
Rain/ Ice	10.22%
Cased by Others	6.12%
9. Circuit 5 Year Average (SAIDI)	3.09847636
10. Reporting Year (SAIDI)	6.176158599
11. Circuit 5 Year Average (SAIFI)	1.799800799
12. Reporting Year (SAIFI)	3.266735324
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #5

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)	58.23
6. Customer Count	416
7. Date of Last Circuit Trim	Mar-12

8. Outage Cause (% of Total Outage Numbers)	
Animals	0.50%
Lightning	8.16%
High Wind	0.22%
Equip. Failure	0.23%
Deteriorated	6.30%
Cars or Trucks	7.11%
Insulation broke	0.00%
Vegetation/Trees	0.00%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	77.49%
Cased by Others	0.00%

9. Circuit 5 Year Average (SAIDI)	0.596821833
10. Reporting Year (SAIDI)	1.854927885
11. Circuit 5 Year Average (SAIFI)	0.372883298
12. Reporting Year (SAIFI)	0.338942308

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

2018

Circuit #6

1. Substation Name and Number	Perryville (6)
2. Substation Location	Boyle-Harrodsburg-Perryville
3. Circuit Name and Number	Mitchelsburg(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)	78.34
6. Customer Count	715
7. Date of Last Circuit Trim	Mar-12
8. Outage Cause (% of Total Outage Numbers)	
Animals	2.11%
Lightning	4.51%
High Wind	6.65%
Equip. Failure	0.34%
Deteriorated	0.36%
Cars or Trucks	2.79%
Insulation broke	0.00%
Vegetation/Trees	23.44%
Trees Cut Into Line	26.78%
Equipment OL	0.00%
Rain/ Ice	29.26%
Cased by Others	3.76%
9. Circuit 5 Year Average (SAIDI)	0.420504804
10. Reporting Year (SAIDI)	1.434778555
11. Circuit 5 Year Average (SAIFI)	0.416689834
12. Reporting Year (SAIFI)	0.511888112
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #7

1. Substation Name and Number	Lebanon (7)
2. Substation Location	Marion-S Harrison St-Lebanon
3. Circuit Name and Number	Danville (1)
4. Circuit Location	US 68 W, Sulphur Spring Rd, Barbers Mill Rd, Shortline Pike, Popes Creek Rd, Hunley Ln, Mays Chapel Rd, Poplar Corner Rd, Tatum Ln, Gravel Switch Rd, Jones Creek Rd
5. Total Circuit Length (Miles)	150.46
6. Customer Count	1091
7. Date of Last Circuit Trim	Mar-14
8. Outage Cause (% of Total Outage Numbers)	
	Animals 0.03%
	Lightning 9.51%
	High Wind 34.07%
	Equip. Failure 0.13%
	Deteriorated 0.00%
	Cars or Trucks 0.00%
	Insulation broke 0.00%
	Vegetation/Trees 36.84%
	Trees Cut Into Line 0.00%
	Equipment OL 0.00%
	Rain/ Ice 15.75%
	Cased by Others 3.67%
9. Circuit 5 Year Average (SAIDI)	1.759646305
10. Reporting Year (SAIDI)	5.070042774
11. Circuit 5 Year Average (SAIFI)	1.055255745
12. Reporting Year (SAIFI)	2.045829514
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	
CFR 311 Siloam Rd	

2018

Circuit #8

1. Substation Name and Number	Loretto (8)
2. Substation Location	Marion-Loretto Rd-Lebanon
3. Circuit Name and Number	Spencer Hamilton (1)
4. Circuit Location	Loretto Rd, Spencer Hamilton Road
5. Total Circuit Length (Miles)	11.89
6. Customer Count	101
7. Date of Last Circuit Trim	Jun-12
8. Outage Cause (% of Total Outage Numbers)	
Animals	55.81%
Lightning	31.10%
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	13.09%
9. Circuit 5 Year Average (SAIDI)	0.062289562
10. Reporting Year (SAIDI)	0.52689769
11. Circuit 5 Year Average (SAIFI)	0.080808081
12. Reporting Year (SAIFI)	0.752475248
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #9

1. Substation Name and Number	Sulpher Ck.(9)
2. Substation Location	Nelson-Gap Knob Rd-New Hope
3. Circuit Name and Number	New Hope(3)
4. Circuit Location	Gap Knob Rd, Sulpher Lick Rd, Coon Hollow Rd, Walter Hall Rd, Strintown Rd, New Hope Rd
5. Total Circuit Length (Miles)	30.07
6. Customer Count	224
7. Date of Last Circuit Trim	May-14
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.18%
Lightning	8.98%
High Wind	17.98%
Equip. Failure	4.97%
Deteriorated	0.00%
Cars or Trucks	0.00%
Insulation broke	0.00%
Vegetation/Trees	37.63%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	21.17%
Cased by Others	9.07%
9. Circuit 5 Year Average (SAIDI)	1.144376907
10. Reporting Year (SAIDI)	5.064955357
11. Circuit 5 Year Average (SAIFI)	0.968808478
12. Reporting Year (SAIFI)	1.705357143
13. List of Corrective Action, If Any, Taken or To Be Taken	

2018

Circuit #10

1. Substation Name and Number	Toddville (14)
2. Substation Location	Garrard-Kennedy Bridge Rd-Toddville
3. Circuit Name and Number	Bourne(2)
4. Circuit Location	Kennedy Bridge Rd, Mt Hebron Rd, Thompson Rd, Sugar Creek Rd, Leavell Ridge Rd, Poor Ridge Pike, Wolf Trail Rd.
5. Total Circuit Length (Miles)	47.33
6. Customer Count	460
7. Date of Last Circuit Trim	May-12
8. Outage Cause (% of Total Outage Numbers)	
Animals	0.24%
Lightning	3.17%
High Wind	43.24%
Equip. Failure	11.43%
Deteriorated	0.00%
Cars or Trucks	0.89%
Insulation broke	0.90%
Vegetation/Trees	27.49%
Trees Cut Into Line	0.00%
Equipment OL	0.00%
Rain/ Ice	8.33%
Cased by Others	4.32%
9. Circuit 5 Year Average (SAIDI)	1.231287388
10. Reporting Year (SAIDI)	1.999384058
11. Circuit 5 Year Average (SAIFI)	1.123799924
12. Reporting Year (SAIFI)	0.800000
13. List of Corrective Action, If Any, Taken or To Be Taken	
2014-2017 Work Plan Actions To Be Taken:	
CFR 336 Poor Ridge Pike	

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

Inter-County Energy completed the first year of its 6 year vegetation management plan which was revised for the 2018 cycle. Inter-County Energy is closely monitoring the results of the cycle progress.

SECTION 7: UTILITY COMMENTS