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April 30, 2015

RECEIVED

MAY 01 2015

PUBLIC SERVICE
COMMISSION

VIA OVERNIGHT DELIVERY

Mr. Kyle Willard
Kentucky Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, KY 40602

**RE: 2014 Reliability Report and Vegetation Management Plan Update
2014 Calendar Year**

Dear Mr. Willard:

Enclosed please find the signed paper and one electronic copy of the Duke Energy Kentucky, Inc. 2014 Reliability Report and Vegetation Management Plan Update.

We have included the unredacted part of Exhibit A in a separate envelope to be filed under seal. Also enclosed is a Petition for Confidential Treatment for your consideration in the above referenced matter.

Please date-stamp the two copies of the letter and the filings and return to me in the enclosed envelope.

Should you have any questions, please do not hesitate to contact me.

Very truly yours,

E. Minna Rolfes-Adkins
Sr. Paralegal

ERA
Enclosures

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

An Investigation of the Reliability)
Measures of Kentucky's Jurisdictional) Administrative
Electric Distribution Utilities) Case No. 2011-00450

**DUKE ENERGY KENTUCKY, INC.'S
PETITION FOR THE CONFIDENTIAL TREATMENT OF CERTAIN
INFORMATION FILED FOR CALENDAR YEAR 2014**

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company) respectfully submits this petition in accordance with 807 KAR 5:001 Section 13, seeking the confidential treatment of certain information filed for calendar year 2014:

1. On January 11, 2012, the Commission issued an Order in this proceeding requiring Duke Energy Kentucky to collect and maintain all records necessary to evaluate its system reliability performance in accordance with the methodology established by the most recent edition of the ("IEEE") standard number 1366 "Guide for Electric Power Distribution Reliability Indices," which currently is IEEE Standard 1366-2012.
2. On May 30, 2013, the Commission issued its Order requiring all jurisdictional utilities to file annual reliability reports and to develop vegetation management plans. Pursuant to the Order, jurisdictional utilities were required to report a 5 year average of reliability data. The reports are required to be based upon a calendar year (January to December) and filed by the first business day in May in the year immediately following the reporting year.

3. The Commission's regulations, in 807 KAR 5:001, Section 13, provide that any person requesting confidential treatment of any material file a petition setting forth the grounds, pursuant to KRS 61.870 *et seq.*, upon which the Commission should classify that material as confidential.

4. Kentucky Revised Statute § 61.878(1)(c)(1) provides that records confidentially disclosed to an agency or required to be disclosed to the agency be exempt from Kentucky's open records statutes, KRS 61.870 *et seq.* where the records are generally recognized as confidential or proprietary, and which if openly disclosed would permit an unfair commercial advantage to competitors of the entity that disclosed the records.

5. Duke Energy Kentucky submits that the following information, if openly disclosed, could present security issues:

- a. Physical street addresses of all the Company's electric substations and circuits.

6. The above information, if openly disclosed, would allow the public knowledge as to the specific physical location of critical utility infrastructure, namely Duke Energy Kentucky substations and circuits. With this information, a possible security issue could arise. Such actions might include theft, destruction, possible injury, and/or vandalism. Releasing the street address of all of the Company's electric substations in one public filing would present a significant security and reliability risk where a concentrated action could undermine Duke Energy Kentucky's distribution system and the security of its grid.

7. The information for which Duke Energy Kentucky is seeking confidential treatment is not known outside of Duke Energy Corporation.

8. Duke Energy Kentucky does not object to limited disclosure of the confidential information described herein, pursuant to an acceptable protective agreement, to the Attorney General or other intervenors with a legitimate interest in reviewing the same for the purpose of participating in this case.

9. Pursuant to 807 KAR 5:001 Section 13(2), Duke Energy Kentucky has attached to this Petition, under seal, one copy of Exhibit A of the 2014 Reliability Report and Vegetation Management Plan and one copy of Exhibit A of the 2014 Reliability Report and Vegetation Management Plan with the confidential material omitted or otherwise redacted. Duke Energy Kentucky respectfully requests that the Confidential Information be withheld from public disclosure indefinitely. This will assure that the Confidential Information will not become available to the general public. To the extent the Confidential information becomes generally available to the public, whether through filings required by other agencies or otherwise, Duke Energy Kentucky will notify the Commission and have its confidential status removed, pursuant to 807 KAR 5:001 Section 13(10)(a).

10. This information was, and remains, integral to Duke Energy Kentucky's effective execution of business decisions. And such information is generally regarded as confidential or proprietary. Indeed, as the Kentucky Supreme Court has found, "information concerning the inner workings of a corporation is 'generally accepted as confidential or proprietary.'" *Hoy v. Kentucky Industrial Revitalization Authority, Ky.*, 904 S.W.2d 766, 768 (Ky. 1995).

WHEREFORE, Duke Energy Kentucky respectfully request that the Commission:

1. Accept this Petition for filing;

2. Grant the information delineated herein confidential treatment in accordance with 807 KAR 5:001 Section 13 and KRS 61.870 *et seq.*

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

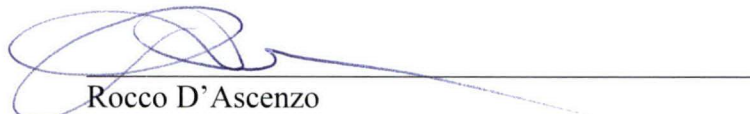


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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing filing was served on the following via overnight mail, this 30 day of April, 2015:

Kentucky Public Staff
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky, 40601



Rocco D'Ascenzo

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

DUKE ENERGY KENTUCKY, INC.
RELIABILITY REPORT AND VEGETATION MANAGEMENT PLAN UPDATE
FOR CALENDAR YEAR 2014

April 30, 2015

TABLE OF CONTENTS

<u>No.</u>	<u>Page</u>
I. Introduction.....	1
II. Reliability Report Summary	1
III. Vegetation Management Update and Summary	3
Electric Distribution Utility Annual Reliability Report.....	Exhibit A
Vegetation Management Plan.....	Exhibit B

I. Introduction

On May 30, 2013, the Commission issued its Order requiring all jurisdictional utilities to file annual reliability reports and to develop vegetation management plans. Pursuant to the Order, jurisdictional utilities were required to report a 5 year average of reliability data. The reports are required to be based upon a calendar year (January to December) and filed by the first business day in May in the year immediately following the reporting year.

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company) submits its Reliability Report and Vegetation Management Plan update for Calendar year 2014 as required by the Commission's May 30, 2013 Order in Case No. 2011-00450.¹

II. Reliability Report Summary

Consistent with the most recent edition of the standard number 1366 "Guide for Electric Power Distribution Reliability Indices," and the Commission's Order,² the following is included in Exhibit A of Duke Energy Kentucky's Reliability Report Summary:

1. Calculate the System Average Interruption Duration Index (SAIDI) system-wide indices including Major Event Days (MEDs) and calculate the SAIDI system-wide indices excluding MEDs;
2. Calculate the System Average Interruption Frequency Index (SAIFI) system-wide indices including MEDs and calculate the SAIFI system-wide indices excluding MEDs;
3. Develop a system-wide rolling five-year average SAIDI excluding MEDs;

¹ *In the matter of An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities, Case No 2011-00450. (Order)(May 30, 2013).*

² *Id.*

4. Develop a system-wide rolling five-year average SAIFI excluding MEDs;
5. Calculate SAIDI excluding MEDs for every circuit within its system;
6. Develop a rolling five-year average SAIDI for each circuit within its system;
7. Compare each circuit to that circuit's rolling five-year average SAIDI;
8. Calculate SAIFI excluding MEDs for every circuit within its system;
9. Develop a rolling five-year average SAIFI for each circuit within its system;
10. Compare each circuit to that circuit's rolling five-year average SAIFI.
11. File a Reliability Report by May 1 of each year, containing the reliability information as outlined in the attached Appendix for the preceding calendar year from January 1 to December 31 that includes the SAIDI and SAIFI system-wide indices, both including and excluding MEDs.
12. For each circuit with either SAIDI or SAIFI value higher than that circuit's respective SAIDI or SAIFI rolling five-year average, excluding MEDs, include in the annual Reliability Report the following information:
 - a. The circuit's SAIDI index for the year;
 - b. The circuit's SAIFI index for the year;
 - c. The circuit's rolling five-year average SAIDI;
 - d. The circuit's rolling five-year average SAIFI;
 - e. The substation name, number and location (Le., County-Road-Town);

- f. The circuit name, number and location (Town-Road-General Area);
- g. The circuit's overall length in miles to the nearest tenth of a mile;
- h. The number of customers served on the circuit for the year;
- i. The date of the last circuit trim performed by the utility as part of its vegetation management plan;
- j. A list of outage causes for the circuit, along with the percentage of total outage numbers represented by each cause;
- k. Circuit five-year average SAIDI;
- l. Reporting year SAIDI;
- m. Circuit five-year average SAIFI;
- n. Reporting year SAIFI;
- o. A Corrective Action Plan which describes any measures the utility has completed or plans to complete to improve the circuit's performance; and
- p. Any other information the utility believes will assist the Commission in understanding the circumstances surrounding the circuit's performance.³

III. Vegetation Management Plan Update and Summary

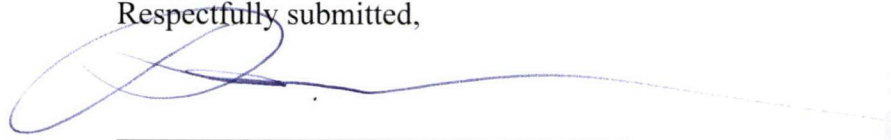
Duke Energy Kentucky filed its initial Vegetation Management Plan with this Commission on December 18, 2007 in Case No. 2006-00494.⁴ Duke Energy's Midwest Vegetation Management Group is responsible for controlling vegetation growth for 37,000 miles of transmission and distribution overhead electric lines and gas supply lines in Ohio, Indiana and Kentucky.

³ *Id.*

Exhibit B is a copy of Duke Energy Kentucky's Vegetation Management Plan. There have been no amendments or changes to the plan since it was initially filed with the Commission on December 18, 2007. There are no amendments or changes planned for 2015.

As part of its 2015 plan, Duke Energy Kentucky plans to trim trees and maintain vegetation along 364 miles of its distribution system. Although the weather conditions were harsh at times, Duke Energy Kentucky was able to get a good start on our Vegetation Plan for 2015. As of April 11, 2015, Duke Energy Kentucky has completed approximately 17.7% of its scheduled trimming, or approximately 64 miles of its distribution system. This leaves approximately 300 miles to be trimmed in 2015. The Company does not anticipate any difficulty in completing all planned trimming for 2015. The Company will have sufficient crew coverage throughout the year.

Respectfully submitted,



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KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1 : CONTACT INFORMATION

UTILITY NAME	DUKE ENERGY KENTUCKY
REPORT PREPARED BY	ILONA KORB
E-MAIL ADDRESS OF PREPARER	ILONA.KORB@DUKE-ENERGY.COM
PHONE NUMBER OF PREPARER	513-287-3121

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT	2014
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SECTION 3: MAJOR EVENT DAYS (MED)

TMED	5.16
FIRST DATE USED TO DETERMINE TMED	Jan 1, 2009
LAST DATE USED TO DETERMINE TMED	December 31, 2013
NUMBER OF MED IN REPORT YEAR	3

NOTE: Per IEEE 1366 TMED 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	137,388	TOTAL CIRCUITS	132
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Excluding MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	119.49	SAIDI	116.38
SAIFI	1.27	SAIFI	1.02

Including MED

5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	206.89	SAIDI	128.86
SAIFI	1.60	SAIFI	1.08

Notes

- 1) All duration indices (SAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April 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, and TMED

SUBSTATION NAME	SUBSTATION NUMBER	SUBSTATION COUNTY	SUBSTATION ROAD	SUBSTATION TOWN	CIRCUIT NAME	CIRCUIT ID	CIRCUIT NUMBER	CIRCUIT TOWN	CIRCUIT ROAD	CIRCUIT GENERAL AREA	TOTAL CIRCUIT LENGTH (miles)	CUSTOMER COUNT FOR THIS CIRCUIT
ATLAS	170 KENTON			ERLANGER	ATLAS - 41	H9321700041	41	CRESCENT SPRING		Crescent Springs, Erlanger	7.75	496
AUGUSTINE	78 KENTON			COVINGTON	AUGUSTINE - 45	H9320780045	45	COVINGTON		Covington	9.78	1024
BELLEVUE	131 CAMPBELL			NEWPORT	BELLEVUE - 43	H9321310043	43	BELLEVUE		Bellevue	23.7	1497
BELLEVUE	131 CAMPBELL			NEWPORT	BELLEVUE - 44	H9321310044	44	BELLEVUE		Bellevue	14.74	1413
BUFFINGTON	67 KENTON			FLORENCE	BUFFINGTON - 43	H9320670043	43	FLORENCE		Florence	6.72	76
BUFFINGTON	67 KENTON			FLORENCE	BUFFINGTON - 44	H9320670044	44	ERLANGER		Erlanger	41.55	3150
BUFFINGTON	67 KENTON			FLORENCE	BUFFINGTON - 46	H9320670046	46	FLORENCE		Florence	8.91	621
CLARYVILLE	147 CAMPBELL			CLARYVILLE	CLARYVILLE - 43	H9321470043	43	CLARYVILLE		Claryville	1.83	6
CONSTANCE	42 BOONE			ERLANGER	CONSTANCE - 44	H9320420044	44	ERLANGER		Erlanger	11.46	319
COVINGTON	217 KENTON			COVINGTON	COVINGTON - 41	H9322170041	41	COVINGTON		Covington	14.18	1026
COVINGTON	217 KENTON			COVINGTON	COVINGTON - 42	H9322170042	42	COVINGTON		Covington	7.36	964
COVINGTON	217 KENTON			COVINGTON	COVINGTON - 43	H9322170043	43	COVINGTON		Covington	12.04	1230
CRESCENT	70 KENTON			FT MITCHELL	CRESCENT - 43	H9320700043	43	FT MITCHELL		Ft. Mitchell	26.49	1636
CRESCENT	70 KENTON			FT MITCHELL	CRESCENT - 44	H9320700044	44	CRESCENT SPRING		Crescent Springs	32.81	2137
CRITTENDEN	124 GRANT			CRITTENDEN	CRITTENDEN - 42	H9321240042	42	CRITTENDEN		Crittenden	29.42	862
DAYTON	76 CAMPBELL			DAYTON	DAYTON - 41	H9320760041	41	DAYTON		Dayton	9.21	1033
DAYTON	76 CAMPBELL			DAYTON	DAYTON - 42	H9320760042	42	DAYTON		Dayton	18.96	1537
DIXIE	89 BOONE			FLORENCE	DIXIE - 41	H9320890041	41	FLORENCE		Florence	3.4	20
DONALDSON	55 KENTON			ERLANGER	DONALDSON - 41	H9320550041	41	ERLANGER		Erlanger and Florence	22.57	2116
DONALDSON	55 KENTON			ERLANGER	DONALDSON - 42	H9320550042	42	ERLANGER		Erlanger	18.01	1240
DONALDSON	55 KENTON			ERLANGER	DONALDSON - 43	H9320550043	43	ERLANGER		Erlanger, Florence, CVG	22.69	752
DONALDSON	55 KENTON			ERLANGER	DONALDSON - 44	H9320550044	44	ERLANGER		Erlanger, Florence, CVG	11.48	638
EMPIRE	289 BOONE			FLORENCE	EMPIRE - 41	H9322890041	41	FLORENCE		Florence, Union	30.78	1812
EMPIRE	289 BOONE			FLORENCE	EMPIRE - 42	H9322890042	42	FLORENCE		Florence	1.2	1
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 41	H9322410041	41	FLORENCE		Florence Mall	2.29	7
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 42	H9322410042	42	FLORENCE		Florence	17.68	607
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 43	H9322410043	43	FLORENCE		Florence Mall	2.31	10
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 44	H9322410044	44	FLORENCE		Florence	19.01	839
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 45	H9322410045	45	FLORENCE		Florence	24.41	1546
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 46	H9322410046	46	FLORENCE		Florence	17.61	958
FLORENCE	241 BOONE			FLORENCE	FLORENCE - 47	H9322410047	47	FLORENCE		Florence	9.91	232
HANDS	128 KENTON			COVINGTON	HANDS - 43	H9321280043	43	INDEPENDENCE		Independence, Taylor Mill	33.95	1804
HEBRON	152 BOONE			HEBRON	HEBRON - 42	H9321520042	42	PETERSBURG		Petersburg	51.35	832
HEBRON	152 BOONE			HEBRON	HEBRON - 43	H9321520043	43	HEBRON		Hebron	5.57	26
HEBRON	152 BOONE			HEBRON	HEBRON - 44	H9321520044	44	HEBRON		Park West International	4.35	37
KENTON	9 KENTON			LAKEVIEW	KENTON - 41	H9320090041	41	FT. WRIGHT		Ft. Wright, Ft. Mitchell	27.89	1510
KENTON	9 KENTON			LAKEVIEW	KENTON - 44	H9320090044	44	FT. WRIGHT		Ft. Wright, Ft. Mitchell	34.81	2291
KENTON	9 KENTON			LAKEVIEW	KENTON - 45	H9320090045	45	LATONIA		Ft. Wright, Latonia	28.43	2731
KENTON	9 KENTON			LAKEVIEW	KENTON - 46	H9320090046	46	LAKEVIEW		Edgewood and Fort Wright	18.49	669
KY UNIV	287 CAMPBELL			NEWPORT	KY UNIV - 43	H9322870043	43	HIGHLAND HEIGHTS		Highland Heights	20.38	681
LIMABURG	189 BOONE			LIMABURG	LIMABURG - 42	H9321890042	42	LIMABURG		Limaburg	47.57	1788
MT ZION	305 BOONE			FLORENCE	MT ZION - 42	H9323050042	42	FLORENCE		Florence	3.96	70
OAKBROOK STA	210 BOONE			FLORENCE	OAKBROOK STA - 41	H9322100041	41	ALEXANDRIA		Alexandria, Ross and Oneonta	15.26	1130
OAKBROOK STA	210 BOONE			FLORENCE	OAKBROOK STA - 42	H9322100042	42	FLORENCE		Imaburg, Oakbrook and Burling	27.33	2258
RICHWOOD	199 BOONE			RICHWOOD	RICHWOOD - 42	H9321990042	42	RICHWOOD		Richwood	37.99	1903
VERONA	125 KENTON			CRITTENDEN	VERONA - 42	H9321250042	42	CRITTENDEN		Walton	27.06	721
VILLA	243 KENTON			EDGEWOOD	VILLA - 43	H9322430043	43	EDGEWOOD		Edgewood	19.51	1758
VILLA	243 KENTON			EDGEWOOD	VILLA - 44	H9322430044	44	EDGEWOOD		Edgewood	34.89	2130
WHITE TOWER	304 KENTON			INDEPENDENCE	WHITE TOWER - 41	H9323040041	41	INDEPENDENCE		Independence, Taylor Mill	89.4	1729
WILDER	59 KENTON			WILDER	WILDER - 41	H9320590041	41	SOUTHGATE		Southgate, Ft Thomas	22.43	1479
WILDER	59 KENTON			WILDER	WILDER - 42	H9320590042	42	FT THOMAS		Ft. Thomas	27.58	2420
WILDER	59 KENTON			WILDER	WILDER - 43	H9320590043	43	COVINGTON		Covington, Latonia	18.71	1647
WILDER	59 KENTON			WILDER	WILDER - 45	H9320590045	45	WILDER		Wilder, Southgate, Ft. Thomas	22.77	2151
WILDER	59 KENTON			WILDER	WILDER - 46	H9320590046	46	FT THOMAS		Ft. Thomas	20.56	1050
YORK	77 CAMPBELL			NEWPORT	YORK - 41	H9320770041	41	Newport		Newport	16.25	1715
YORK	77 CAMPBELL			NEWPORT	YORK - 42	H9320770042	42	Newport		Newport	9.15	1035

DATE OF LAST CIRCUIT TRIM (VEGETATION MANAGEMENT)	CIRCUIT 5-YEAR AVERAGE (SAIDI)	REPORTING YEAR (2014) SAIDI	DID SAIDI INCREASE IN 2014?	CIRCUIT 5-YEAR AVERAGE (SAIFI)	REPORTING YEAR (2014) SAIFI	DID SAIFI INCREASE IN 2014?
10/20/2012	79.25837696	61.60483871	NO	1.07513089	1.116935484	YES
9/27/2013	78.46805195	40.515625	NO	0.544069264	0.579101563	YES
10/15/2011	63.51060095	94.2004008	YES	0.5513842	1.564462258	YES
9/30/2011	43.66402827	17.0353657	NO	0.541909127	0.684359519	YES
11/7/2014	72.66666667	237	YES	0.498966667	1.684210526	YES
4/2/2011	134.7079164	201.1079365	YES	1.222039265	1.314803175	YES
10/11/2014	106.6132258	95.32689211	NO	0.565483871	1.336553945	YES
8/5/2011	63.73333333	205.5	YES	0.868868689	0.333333333	NO
12/17/2011	49.04531722	666.7680251	YES	1.248942598	1.043887147	NO
12/5/2013	46.64756335	90.42105263	YES	1.137037037	1.111111111	NO
12/5/2013	26.3756126	94.85062241	YES	0.6126021	1.164937759	YES
11/7/2014	44.44583884	84.01382114	YES	0.952972259	1.029268293	YES
12/6/2014	90.57746305	144.1552967	YES	1.459852217	1.663814181	YES
7/2/2011	151.9272131	89.68226486	NO	1.020702576	2.589143659	YES
8/10/2013	120.4748201	147.1417234	YES	1.067831449	1.333333333	YES
10/22/2011	24.8137931	49.77153921	YES	0.174036511	0.475314618	YES
10/29/2011	59.16202381	79.99739753	YES	0.441547619	1.13272609	YES
4/2/2011	23.56	27.45	YES	0.32	0.15	NO
11/1/2014	77.41586453	33.786862	NO	1.0057041	2.217863894	YES
8/20/2011	106.204814	31.39758065	NO	1.318161926	2.122580645	YES
11/15/2014	78.84852547	35.73670213	NO	1.175067024	2.15026957	YES
8/20/2011	39.60850394	19.17554859	NO	0.540787402	2.031347962	YES
10/15/2013	183.9522727	462.1550773	YES	1.837337662	4.255516764	YES
10/19/2013	35.94	343	YES	0.32	3	YES
underground circuit	47.51428571	213.1428571	YES	0.742857143	2	YES
8/20/2011	91.50091743	241.1301483	YES	1.081039755	2.453047776	YES
underground circuit	125.82	254	YES	0.82	2	YES
7/11/2011	29.90692124	198.659118	YES	0.356085919	3.430274136	YES
8/13/2011	62.62688312	301.0963777	YES	0.574285714	3.044631307	YES
7/16/2011	47.93834901	366.4665971	YES	0.60292581	3.211899791	YES
8/20/2011	78.54638298	307.0517241	YES	1.033191489	1.818965517	YES
10/12/2012	39.62243198	82.27605322	YES	0.466851749	1.029379157	YES
5/22/2014	88.37785013	143.0553797	YES	0.883342037	0.878164557	NO
underground circuit	72.83703704	242.3076923	YES	1.096666667	0.423076923	NO
underground circuit	31.81081081	1097.027027	YES	1.037837838	2.567567568	YES
12/5/2013	85.19773484	170.0774834	YES	0.800932712	1.282119205	YES
8/10/2013	73.77084243	213.2693147	YES	0.971890004	1.578786556	YES
12/10/2011	37.65525581	77.16367631	YES	0.499255814	1.203954595	YES
8/10/2013	101.6804185	381.1449925	YES	1.097458864	3.165919283	YES
9/22/2014	22.99970326	47.41703377	YES	0.395252226	0.882525698	YES
12/17/2011	120.7276906	729.3557047	YES	1.778026906	3.154362416	YES
8/25/2011	27.93043478	128.1857143	YES	0.420269855	1.285714286	YES
10/19/2013	213.3586207	784.1460177	YES	1.769905956	3.022123894	YES
10/19/2013	248.4378136	1088.834367	YES	2.175	4.235163862	YES
11/12/2013	73.40084971	54.92538098	NO	0.558789166	0.633736206	YES
10/26/2013	80.29545455	119.3522885	YES	0.566193182	1.077669903	YES
5/16/2014	103.8108731	148.2406143	YES	1.350411862	2.20705347	YES
7/2/2011	163.765652	188.1633803	YES	1.895678316	2.444131455	YES
4/13/2012	184.1775476	156.611336	NO	1.763877382	2.089088826	YES
5/25/2012	119.4761841	166.5936444	YES	1.348632422	1.393509128	YES
8/22/2012	61.34933444	231.3966942	YES	0.781896839	1.379338643	YES
10/16/2012	73.98611449	85.83995143	YES	0.835209974	0.448087432	NO
10/16/2012	80.3496337	397.4714086	YES	1.037087912	2.460004649	YES
10/16/2012	170.525847	315.912381	YES	1.618780252	2.160952381	YES
1/7/2011	9.440091638	11.12361516	YES	0.095761741	0.114285714	YES
11/7/2014	8.965458422	32.18743961	YES	0.081876333	0.226120773	YES

SUBSTATION - CIRCUIT	CIRCUIT NAME	CIRCUIT ID	OUTAGE CAUSE	PERCENT OF TOTAL OUTAGE MINUTES	Corrective Action Plan
ATLAS - H9321700041	ATLAS - 41	H9321700041	Public Accident	67.9%	Public Accident with transmission pole. Non-preventable. No further action required.
			Equipment failure	28.8%	
			Wildlife	2.5%	
			Other Cause	0.8%	
			Planned (IEEE)	0.0%	
ATLAS - H9321700041 Total					100.0%
AUGUSTINE - H9320780045	AUGUSTINE - 45	H9320780045	Wildlife	91.9%	Fuse replaced at time of outage. No further action required.
			Public Accident	3.7%	
			Unknown Cause	1.7%	
			Other Cause	1.6%	
			Equipment failure	0.8%	
			Planned (IEEE)	0.3%	
			Weather	0.0%	
AUGUSTINE - H9320780045 Total					100.0%
BELLEVUE - H9321310043	BELLEVUE - 43	H9321310043	Public Accident	64.8%	Public Accident. Circuit was switched incorrectly bypass electronic recloser 4804 causing circuit lockout. Correct switching would have saved 1008 customers and 61,488 Customer minutes. Switching was corrected. Feeder typically has excellent reliability. No further action required.
			Vegetation	21.0%	
			Planned (IEEE)	10.7%	
			Other Cause	1.6%	
			Equipment failure	0.9%	
			Wildlife	0.9%	
			Unknown Cause	0.3%	
			BELLEVUE - H9321310043 Total		
BELLEVUE - H9321310044	BELLEVUE - 44	H9321310044	Planned (IEEE)	61.9%	Planned outages for system upgrades. No additional actions require.
			Equipment failure	11.8%	
			Vegetation	11.2%	
			Public Accident	7.0%	
			Other Cause	6.0%	
			Unknown Cause	2.0%	
			Wildlife	0.0%	
			BELLEVUE - H9321310044 Total		
BUFFINGTON - H9320670043	BUFFINGTON - 43	H9320670043	Equipment failure	54.0%	Repaired equipment that caused outage. No additional actions required.
			Vegetation	37.6%	
			Unknown Cause	8.4%	
			Other Cause	0.0%	
			Planned (IEEE)	0.0%	
BUFFINGTON - H9320670043 Total					100.0%
BUFFINGTON - H9320670044	BUFFINGTON - 44	H9320670044	Public Accident	85.9%	Public accident with transmission pole. Non-preventable. No further action required.
			Equipment failure	4.0%	
			Unknown Cause	3.9%	
			Vegetation	3.2%	
			Other Cause	2.3%	
			Planned (IEEE)	0.3%	
			Wildlife	0.3%	
			Lightning strike	0.0%	
			Weather	0.0%	
			BUFFINGTON - H9320670044 Total		
BUFFINGTON - H9320670046	BUFFINGTON - 46	H9320670046	Lightning strike	75.6%	Lightning strike between substation and electronic line recloser. Non-preventable. No additional actions required.
			Equipment failure	13.9%	
			Weather	9.2%	
			Other Cause	0.9%	
			Planned (IEEE)	0.3%	
			Public Accident	0.1%	
			Unknown Cause	0.0%	
			BUFFINGTON - H9320670046 Total		
CLARYVILLE - H9321470043	CLARYVILLE - 43	H9321470043	Equipment failure	92.5%	Equipment failure permanently repaired. No additional actions required.
CLARYVILLE - H9321470043 Total			Wildlife	7.5%	
CONSTANCE - H9320420044	CONSTANCE - 44	H9320420044	Weather	99.2%	Transmission Outage repaired at time of outage. No additional work or remediation required.
			Other Cause	0.6%	
			Equipment failure	0.1%	
			Unknown Cause	0.1%	
CONSTANCE - H9320420044 Total					100.0%
COVINGTON - H9322170041	COVINGTON - 41	H9322170041	Equipment failure	90.3%	Transmission Outage repaired at time of outage. No additional work or remediation required.
			Vegetation	3.4%	
			Wildlife	3.3%	
			Planned (IEEE)	2.0%	
			Other Cause	0.7%	
			Lightning strike	0.2%	
			Unknown Cause	0.1%	
			Public Accident	0.0%	
			COVINGTON - H9322170041 Total		
COVINGTON - H9322170042	COVINGTON - 42	H9322170042	Equipment failure	84.5%	Transmission Outage repaired at time of outage. No additional work or remediation required.
			Vegetation	9.9%	
			Planned (IEEE)	3.2%	
			Unknown Cause	1.3%	
			Other Cause	1.2%	
COVINGTON - H9322170042 Total					100.0%

COVINGTON - H9322170043	COVINGTON - 43	H9322170043	Equipment failure	92.0%	Transmission Outage repaired at time of outage. No additional work or remediation required.
			Wildlife	3.3%	
			Lightning strike	2.0%	
			Other Cause	1.4%	
			Planned (IEEE)	0.4%	
			Vegetation	0.3%	
			Public Accident	0.2%	
			Unknown Cause	0.2%	
			Weather	0.0%	
COVINGTON - H9322170043 Total				100.0%	
CRESCENT - H9320700043	CRESCENT - 43	H9320700043	Unknown Cause	33.4%	Feeder scheduled to be made a Self-Healing circuit in 2015.
			Equipment failure	29.3%	
			Weather	28.0%	
			Vegetation	8.1%	
			Wildlife	0.8%	
			Planned (IEEE)	0.2%	
			Other Cause	0.1%	
CRESCENT - H9320700043 Total				100.0%	
CRESCENT - H9320700044	CRESCENT - 44	H9320700044	Equipment failure	42.1%	Repaired equipment that caused outages. Circuit is scheduled for a reduction in circuit length in 2015.
			Weather	23.9%	
			Planned (IEEE)	16.0%	
			Public Accident	10.6%	
			Vegetation	5.6%	
			Unknown Cause	1.2%	
			Other Cause	0.4%	
			Wildlife	0.0%	
CRESCENT - H9320700044 Total				100.0%	
CRITTENDEN - H9321240042	CRITTENDEN - 42	H9321240042	Equipment failure	58.6%	Equipment repaired. No additional actions required.
			Other Cause	18.8%	
			Planned (IEEE)	9.1%	
			Public Accident	5.8%	
			Weather	5.6%	
			Unknown Cause	1.1%	
			Wildlife	0.9%	
			Lightning strike	0.1%	
CRITTENDEN - H9321240042 Total				100.0%	
DAYTON - H9320760041	DAYTON - 41	H9320760041	Vegetation	64.0%	Vegetation removed from line. No additional actions required.
			Wildlife	22.6%	
			Unknown Cause	7.1%	
			Lightning strike	2.6%	
			Other Cause	2.3%	
			Planned (IEEE)	1.0%	
			Equipment failure	0.3%	
DAYTON - H9320760041 Total				100.0%	
DAYTON - H9320760042	DAYTON - 42	H9320760042	Vegetation	59.0%	Vegetation removed from line. No additional actions required.
			Equipment failure	28.9%	
			Other Cause	4.8%	
			Unknown Cause	3.5%	
			Planned (IEEE)	3.0%	
			Lightning strike	0.7%	
			Wildlife	0.1%	
			Weather	0.0%	
DAYTON - H9320760042 Total				100.0%	
DIXIE - H9320890041	DIXIE - 41	H9320890041	Lightning strike	52.1%	Single customer outage caused by unpreventable lightning strike. Equipment repaired. No additional actions required.
			Public Accident	24.2%	
			Planned (IEEE)	23.7%	
			Other Cause	0.0%	
DIXIE - H9320890041 Total				100.0%	
DONALDSON - H9320550041	DONALDSON - 41	H9320550041	Weather	26.6%	Transmission outage due to weather. Insulators repaired. No additional actions required. For other outages on circuit, equipment repaired, no additional actions required.
			Other Cause	26.4%	
			Unknown Cause	23.9%	
			Equipment failure	16.7%	
			Wildlife	4.4%	
			Planned (IEEE)	1.8%	
			Public Accident	0.1%	
			Vegetation	0.0%	
DONALDSON - H9320550041 Total				100.0%	
DONALDSON - H9320550042	DONALDSON - 42	H9320550042	Weather	28.5%	Transmission outage due to weather. Insulators repaired. No additional actions required. For other outages on circuit, equipment repaired, no additional actions required.
			Unknown Cause	28.1%	
			Lightning strike	19.7%	
			Other Cause	10.5%	
			Wildlife	10.1%	
			Planned (IEEE)	1.4%	
			Equipment failure	1.3%	
			Public Accident	0.3%	
DONALDSON - H9320550042 Total				100.0%	
DONALDSON - H9320550043	DONALDSON - 43	H9320550043	Lightning strike	31.8%	Lightning strike and transmission outage due to weather. Insulators repaired. No additional actions required. For other outages on circuit, equipment repaired, no additional actions required.
			Weather	31.4%	
			Unknown Cause	23.3%	
			Planned (IEEE)	7.3%	
			Other Cause	3.1%	
			Equipment failure	1.7%	
			Vegetation	1.5%	
DONALDSON - H9320550043 Total				100.0%	

DONALDSON - H9320550044	DONALDSON - 44	H9320550044	Weather	46.7%	Outages due to weather and repaired at time of outage. No additional actions required.	
			Unknown Cause	43.9%		
			Other Cause	8.4%		
			Equipment failure	1.0%		
DONALDSON - H9320550044 Total					100.0%	
EMPIRE - H9322890041	EMPIRE - 41	H9322890041	Public Accident	44.1%	Non-preventable public accident. Equipment repaired. No additional actions required.	
			Equipment failure	30.3%		
			Wildlife	23.3%		
			Weather	1.0%		
			Planned (IEEE)	0.5%		
			Other Cause	0.4%		
			Vegetation	0.3%		
			Unknown Cause	0.1%		
EMPIRE - H9322890041 Total					100.0%	
EMPIRE - H9322890042	EMPIRE - 42	H9322890042	Public Accident	59.5%	Transmission Outage repaired at time of outage. No additional work or remediation required.	
			Equipment failure	40.5%		
EMPIRE - H9322890042 Total					100.0%	
FLORENCE - H9322410041	FLORENCE - 41	H9322410041	Weather	94.8%	Transmission outage due to weather. Insulators repaired. No additional actions required.	
			Unknown Cause	5.2%		
FLORENCE - H9322410041 Total					100.0%	
FLORENCE - H9322410042	FLORENCE - 42	H9322410042	Weather	57.7%	Transmission outage due to weather. Insulators repaired. No additional actions required.	
			Vegetation	22.2%		
			Lightning strike	7.2%		
			Wildlife	5.2%		
			Unknown Cause	4.8%		
			Equipment failure	2.2%		
			Planned (IEEE)	0.5%		
			Other Cause	0.1%		
			Public Accident	0.0%		
FLORENCE - H9322410042 Total						100.0%
FLORENCE - H9322410043	FLORENCE - 43	H9322410043	Weather	95.7%	Transmission outage due to weather. Insulators repaired. No additional actions required.	
			Unknown Cause	4.3%		
			Other Cause	0.0%		
FLORENCE - H9322410043 Total					100.0%	
FLORENCE - H9322410044	FLORENCE - 44	H9322410044	Vegetation	36.8%	One outage coded as two events caused by a tree on the line. An electronic recloser is scheduled for this circuit 2015 that would have reduced the outage to half the circuit.	
			Weather	32.0%		
			Equipment failure	10.1%	One weather outage caused 32% of customer minutes. Transmission insulators iced over and flashed. Sectionalization planned for this circuit in 2015.	
			Wildlife	8.0%		
			Unknown Cause	5.6%		
			Other Cause	3.8%		
			Lightning strike	3.8%		
FLORENCE - H9322410044 Total					100.0%	
FLORENCE - H9322410045	FLORENCE - 45	H9322410045	Public Accident	64.9%	One outage coded as two events caused by a public accident. No additional work or remediation required. This is a Self-Healing Circuit, customer minutes would have been greatly reduced, however temporary switching had the team disabled.	
			Weather	25.1%		
			Unknown Cause	3.7%		
			Planned (IEEE)	2.6%		
			Equipment failure	1.7%		
			Lightning strike	1.6%		
			Vegetation	0.2%		
			Other Cause	0.1%		
FLORENCE - H9322410045 Total					100.0%	
FLORENCE - H9322410046	FLORENCE - 46	H9322410046	Weather	53.6%	Transmission Outage due to weather.. No additional work or remediation required.	
			Equipment failure	39.7%		
			Unknown Cause	3.5%	Equipment failure at station exit caused 39.5% of circuit customer minutes. Equipment repaired at time of outage. No additional work or remediation required.	
			Other Cause	1.4%		
			Public Accident	0.7%		
			Wildlife	0.6%		
			Vegetation	0.5%		
			Planned (IEEE)	0.0%		
FLORENCE - H9322410046 Total						100.0%
FLORENCE - H9322410047	FLORENCE - 47	H9322410047	Weather	94.8%	Transmission Outage due to weather.. No additional work or remediation required.	
			Unknown Cause	3.5%		
			Equipment failure	1.3%		
			Planned (IEEE)	0.4%		
FLORENCE - H9322410047 Total					100.0%	
HANDS - H9321280043	HANDS - 43	H9321280043	Vegetation	97.0%	Vegetation removed from line. No additional actions required.	
			Equipment failure	0.9%		
			Planned (IEEE)	0.6%		
			Other Cause	0.5%		
			Wildlife	0.5%		
			Public Accident	0.4%		
			Unknown Cause	0.1%		
HANDS - H9321280043 Total					100.0%	

HEBRON - H9321520042	HEBRON - 42	H9321520042	Vegetation	53.2%	84.3% circuit customer minutes caused by vegetation on line. Vegetation removed from line. No additional actions required.
			Weather	31.1%	
			Wildlife	4.3%	
			Unknown Cause	4.1%	
			Equipment failure	3.7%	
			Planned (IEEE)	1.5%	
			Public Accident	0.9%	
			Lightning strike	0.8%	
			Other Cause	0.3%	
HEBRON - H9321520042 Total				100.0%	
HEBRON - H9321520043	HEBRON - 43	H9321520043	Equipment failure	98.2%	Underground power cable failure. Cable has been replaced. No additional actions required.
			Wildlife	1.8%	
			Planned (IEEE)	0.0%	
HEBRON - H9321520043 Total				100.0%	
HEBRON - H9321520044	HEBRON - 44	H9321520044	Equipment failure	59.9%	One outage coded as four events caused 59.9% of circuit customer minutes. Equipment repaired. No additional work or remediation required.
			Weather	26.2%	
			Wildlife	13.9%	
HEBRON - H9321520044 Total				100.0%	
KENTON - H9320090041	KENTON - 41	H9320090041	Equipment failure	75.5%	Substation insulator repaired. Self-Healing team did not "partial-restore" due to equipment conflicts. Equipment repaired and conflicts corrected. No additional actions required.
			Vegetation	12.9%	
			Unknown Cause	6.2%	
			Public Accident	3.4%	
			Planned (IEEE)	1.3%	
			Wildlife	0.7%	
			Other Cause	0.0%	
KENTON - H9320090041 Total				100.0%	
KENTON - H9320090044	KENTON - 44	H9320090044	Vegetation	76.3%	Vegetation removed from line. No additional actions required.
			Lightning strike	10.6%	
			Weather	9.3%	
			Equipment failure	1.3%	
			Wildlife	0.9%	
			Planned (IEEE)	0.7%	
			Public Accident	0.5%	
			Other Cause	0.4%	
			Unknown Cause	0.0%	
KENTON - H9320090044 Total				100.0%	
KENTON - H9320090045	KENTON - 45	H9320090045	Equipment failure	77.9%	Substation insulator repaired. No additional actions required.
			Wildlife	11.0%	
			Planned (IEEE)	5.0%	
			Other Cause	3.2%	
			Lightning strike	2.1%	
			Unknown Cause	0.3%	
			Vegetation	0.2%	
			Public Accident	0.2%	
			Weather	0.0%	
KENTON - H9320090045 Total				100.0%	
KENTON - H9320090046	KENTON - 46	H9320090046	Vegetation	73.1%	Vegetation removed from line. No additional actions required.
			Equipment failure	26.4%	
			Planned (IEEE)	0.2%	
			Weather	0.1%	
			Other Cause	0.1%	
			Unknown Cause	0.1%	
KENTON - H9320090046 Total				100.0%	
KY UNIV - H9322870043	KY UNIV - 43	H9322870043	Public Accident	48.7%	Non preventable public accident. Equipment repaired. No additional actions required.
			Other Cause	24.5%	
			Planned (IEEE)	13.9%	
			Lightning strike	6.5%	
			Wildlife	5.1%	
			Unknown Cause	1.1%	
			Equipment failure	0.3%	
			Vegetation	0.0%	
KY UNIV - H9322870043 Total				100.0%	
LIMABURG - H9321890042	LIMABURG - 42	H9321890042	Public Accident	53.1%	Two vehicular accidents coded as five events caused 53.1% of circuit customer minutes. No additional work or remediation required.
			Other Cause	43.2%	One outage coded as three events caused 42% of circuit customer minutes. Transmission and switching related outage. No additional work or remediation required.
			Equipment failure	3.4%	
			Vegetation	0.1%	
			Loss of transmission/generati	0.1%	
			Wildlife	0.1%	
			Unknown Cause	0.0%	
			Weather	0.0%	
			Planned (IEEE)	0.0%	
LIMABURG - H9321890042 Total				100.0%	

MT ZION - H9323050042	MT ZION - 42	H9323050042	Vegetation	81.9%	Tree on line removed. No additional work or remediation required.
			Unknown Cause	15.1%	
			Equipment failure	2.2%	
			Other Cause	0.8%	
			Planned (IEEE)	0.0%	
MT ZION - H9323050042 Total				100.0%	
OAKBROOK STA - H9322100041	OAKBROOK STA - 41	H9322100041	Other Cause	44.6%	Non preventable public accident with transmission pole. Equipment repaired. No additional actions required.
			Vegetation	37.8%	
			Equipment failure	12.8%	
			Planned (IEEE)	4.4%	
			Unknown Cause	0.3%	
			Public Accident	0.0%	
OAKBROOK STA - H9322100041 Total				100.0%	
OAKBROOK STA - H9322100042	OAKBROOK STA - 42	H9322100042	Other Cause	78.4%	Non preventable public accident with transmission pole. Equipment repaired. No additional actions required.
			Equipment failure	16.6%	
			Planned (IEEE)	4.0%	
			Weather	0.7%	
			Public Accident	0.2%	
			Unknown Cause	0.1%	
			Wildlife	0.0%	
			Vegetation	0.0%	
OAKBROOK STA - H9322100042 Total				100.0%	
RICHWOOD - H9321990042	RICHWOOD - 42	H9321990042	Equipment failure	72.7%	One outage coded as two events caused 55.6% circuit customer minute. Equipment repaired. No additional actions required.
			Public Accident	24.3%	
			Other Cause	0.9%	
			Unknown Cause	0.8%	
			Planned (IEEE)	0.6%	
			Wildlife	0.4%	
			Weather	0.3%	
			Lightning strike	0.1%	
			Vegetation	0.0%	
RICHWOOD - H9321990042 Total				100.0%	
VERONA - H9321250042	VERONA - 42	H9321250042	Vegetation	92.4%	One outage coded as three events caused 92.28% circuit customer minutes. Tree removed from line. No additional actions required.
			Equipment failure	3.5%	
			Wildlife	2.7%	
			Lightning strike	1.0%	
			Planned (IEEE)	0.3%	
			Other Cause	0.1%	
			Public Accident	0.0%	
VERONA - H9321250042 Total				100.0%	
VILLA - H9322430043	VILLA - 43	H9322430043	Public Accident	56.0%	Non preventable public accident. Equipment repaired. No additional actions required.
			Equipment failure	39.1%	
			Wildlife	2.2%	
			Vegetation	1.6%	
			Weather	0.9%	
			Other Cause	0.1%	
			Planned (IEEE)	0.0%	
VILLA - H9322430043 Total				100.0%	
VILLA - H9322430044	VILLA - 44	H9322430044	Equipment failure	51.9%	Replaced equipment which caused transmission equipment failure. No additional actions required. Non preventable public accident with transmission pole. Equipment repaired. No additional actions required.
			Public Accident	22.3%	
			Vegetation	15.8%	
			Weather	4.7%	
			Wildlife	3.1%	
			Lightning strike	1.3%	
			Planned (IEEE)	0.5%	
			Other Cause	0.2%	
			Unknown Cause	0.1%	
VILLA - H9322430044 Total				100.0%	
WHITE TOWER - H9323040041	WHITE TOWER - 41	H9323040041	Vegetation	76.7%	Tree on line removed. No additional work or remediation required.
			Public Accident	15.1%	
			Unknown Cause	5.2%	
			Equipment failure	1.3%	
			Other Cause	0.8%	
			Wildlife	0.5%	
			Planned (IEEE)	0.4%	
			Weather	0.1%	
			Lightning strike	0.0%	
WHITE TOWER - H9323040041 Total				100.0%	

WILDER - H9320590041	WILDER - 41	H9320590041	Equipment failure	60.5%	One outage coded as four events caused 58.26% circuit customer minutes. Equipment has been replaced. No additional actions required.
			Weather	24.2%	
			Lightning strike	11.4%	
			Planned (IEEE)	3.0%	
			Wildlife	0.5%	
			Unknown Cause	0.3%	
			Vegetation	0.1%	
			Other Cause	0.1%	
WILDER - H9320590041 Total				100.0%	
WILDER - H9320590042	WILDER - 42	H9320590042	Equipment failure	87.2%	Conductor failure due to lightning strike. Equipment has been replaced. No additional actions required.
			Lightning strike	5.1%	
			Other Cause	3.8%	
			Public Accident	2.1%	
			Planned (IEEE)	1.6%	
			Unknown Cause	0.1%	
			Vegetation	0.1%	
			Wildlife	0.0%	
WILDER - H9320590042 Total				100.0%	
WILDER - H9320590043	WILDER - 43	H9320590043	Equipment failure	69.4%	Connector failure on conductor. Equipment has been repaired. No additional actions required.
			Wildlife	17.0%	
			Vegetation	12.1%	
			Other Cause	0.8%	
			Planned (IEEE)	0.4%	
			Unknown Cause	0.3%	
WILDER - H9320590043 Total				100.0%	
WILDER - H9320590045	WILDER - 45	H9320590045	Weather	78.8%	Tree on line removed. No additional work or remediation required.
			Other Cause	7.8%	
			Vegetation	6.6%	
			Equipment failure	4.5%	
			Wildlife	1.0%	
			Planned (IEEE)	1.0%	
			Unknown Cause	0.1%	
			Lightning strike	0.0%	
WILDER - H9320590045 Total				100.0%	
WILDER - H9320590046	WILDER - 46	H9320590046	Equipment failure	92.2%	Conductor failure repaired. No additional actions required.
			Wildlife	4.2%	
			Planned (IEEE)	1.8%	
			Other Cause	1.4%	
			Unknown Cause	0.4%	
			Vegetation	0.0%	
WILDER - H9320590046 Total				100.0%	
YORK - H9320770041	YORK - 41	H9320770041	Equipment failure	54.8%	Equipment replaced. No additional actions required.
			Unknown Cause	31.4%	
			Other Cause	10.2%	
			Planned (IEEE)	3.5%	
			Public Accident	0.0%	
YORK - H9320770041 Total				100.0%	
YORK - H9320770042	YORK - 42	H9320770042	Equipment failure	52.6%	Connection failure at underground transformer. Equipment repaired. No additional actions required.
			Weather	26.4%	
			Wildlife	14.3%	
			Planned (IEEE)	3.1%	
			Other Cause	2.5%	
			Unknown Cause	1.1%	
			Public Accident	0.0%	
YORK - H9320770042 Total				100.0%	

Duke Energy Kentucky's Vegetation Management Plan

Goals

Duke Energy's goals for its Vegetation Management Operations are to balance the need for reliable utility service with safe and cost-effective vegetation management practices that preserve our local communities' natural surroundings, aesthetics and the environment. Targeted herbicides provide one of the most cost-effective and environmentally friendly means of controlling undesirable vegetation.

Safety

Our goals are to work safely at all times to achieve a zero injury culture and to minimize the safety risk of vegetation and conductor contacts. Serious or fatal shocks can occur when working in trees near power lines. Duke Energy strives to minimize that risk by trimming properly in accordance with industry tree trimming safety standards.

Reliability

Duke Energy's electric service reliability, as measured by SAIFI and SAIDI, has improved in recent years due in part to our more rigorous tree trimming practices. Duke Energy strives to trim its Kentucky distribution circuits every four-and-one-half years and transmission every six years.

Tree Care Standards

Duke Energy requires its employees and contractors to prune trees in accordance with American National Standards Institute (ANSI) and National Arborist Association (NAA) standards. The relevant standards are ANSI Z133, Safety in Tree Trimming Operations, and ANSI A300, Safety in Tree Care Operations. These ANSI standards were developed in cooperation with the NAA. Additionally, Duke Energy follows the practices in Field Guide for Qualified Line Clearance Tree Workers by Dr. Alex L. Shigo, former head of the U.S. Forest Service. In rural areas, Duke Energy may authorize its contractors to use mechanized pruning equipment.

Tree Trimming Specifications

69KV and above Transmission Lines

- 15 feet clearance to the side from all conductors.
- 15 feet clearance below the lowest conductor.
- No overhanging/encroaching branches permitted.
- Trim to the previously established widths of our right-of-way and practice established beyond the 15 feet widths.

3 Phase Primary Lines

- 10 feet clearance to the side from all conductors.
- 10 feet clearance below the conductors.
- No overhanging/encroaching branches.

Single Phase and Two Phase Primary lines

- 10 feet clearance to the side from all conductors.
- 10 feet clearance below the conductors.
- Overhang: all live branches above the conductors shall be removed to a minimum height of 15 feet, and at a 45-degree angle. All dead and structurally weak branches overhanging any primary voltage wires shall be removed.
- Underneath the primary: 10 feet clearance from the conductors to the closest limbs beneath the phases.

Secondary Lines

- 5 feet clearance to the side from the secondary line.
- 5 feet clearance above and below the secondary line.

Services Lines

- 1 foot swing clearance from all service lines.

Brush/Wood Removal

- Circuit maintenance - brush is removed, wood cut into movable pieces.
- Customer may request off-cycle maintenance in accordance with the clearance standards above - brush and wood is customer's responsibility.
- Storm Work - no brush or wood removal.

Customer Notification

- Duke Energy customers are notified of tree trimming being done on their property by door hanger cards.
- Duke Energy requires its contractors to contact local government officials prior to beginning work in the community.

Right Tree In The Right Place

- Duke Energy will cooperate in tree removal with local government officials as needed.

Determination of Need to Perform Maintenance/Evaluation of Plan Effectiveness

Duke Energy regularly monitors its SAIFI and SAIDI measures. If SAIFI or SAIDI were to significantly decline, Duke Energy would evaluate whether to modify its vegetation management practices, including its right-of-way clearing cycle, in order to improve SAIFI and SAIDI performance. Duke Energy also monitors the performance of individual circuits. In an individual circuit has a significant number of outages, Duke Energy will perform off-cycle tree trimming as needed. Duke Energy also monitors industry tree trimming standards and modifies its tree trimming practices as necessary to meet or exceed industry standards.