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COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION

2013 RELIABILITY REPORT AS REQUIRED BY
ADMINISTRATIVE CASE No. 2011-00450

Due on or before April 1st. 2014

CLARK ENERGY
COOPERATIVE, INC
WINCHESTER, KENTUCKY

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Clark Energy Cooperative</u>
REPORT PREPARED BY	1.2	<u>Scott Sidwell</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u>ssidwell@clarkenergy.com</u>
PHONE NUMBER OF PREPARER	1.4	<u>859-901-9229</u>

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	<u>2013</u>
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SECTION 3: MAJOR EVENT DAYS

	T_{MED}	3.1	<u>13.66808714</u>
FIRST DATE USED TO DETERMINE T_{MED}		3.2	<u>1/1/2008</u>
LAST DATE USED TO DETERMINE T_{MED}		3.3	<u>12/31/2012</u>
NUMBER OF MED IN REPORT YEAR		3.4	<u>2 Days</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>25,718</u>	TOTAL CIRCUITS	<u>70</u>
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Excluding MED

5 Year Average

SAIDI	117.65
SAIFI	1.36

Reporting Year

SAIDI	120.19
SAIFI	1.34

Including MED

5 Year Average

SAIDI	896.94
SAIFI	2.33

Reporting Year

SAIDI	171.16
SAIFI	1.79

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

KENTUCKY PUBLIC SERVICE COMMISSION

Clark Energy continues to have a strong ROW clearing program with increases in funding each of the last ten years. We are currently on a seven year clearing rotation with trimming of yard trees every two to three years.

Our clearing cycle is followed up with herbicide the following year to two years in order to keep the ROW corridor clear of trees and brush to make service restoration easier and safer.

SECTION 8: UTILITY COMMENTS

Although several of Clark Energy's individual overhead distribution circuits exceed the 5 year average of either SAIDA or SAIFI it can be argued that in most cases an individual large outage or a few large outages has put the circuit over the average but as a whole does not overly affect the system average for the year. 2013's indices were in line with both SAIDI and SAIFI's five year average with MED's and without.

Clark Energy's outages are reviewed daily, reported to our board monthly and most outage problems are corrected shortly after they are restored. Even if a particular circuit needs to have an overall ROW clearing we would still hot spot the areas until ROW crews can be assigned or the substation work bided out.

Since the last big ice storm of 2009 we have implemented 27 Conductor upgrade projects, installed 12 New three phase feeders, added two new substations and average approximately 400 poles per year changed out. This system hardening in our opinion is showing results during severe weather and ice accumulation.

Therefore in some cases we did not formulate a plan to individually correct problems since we address those issues as they arise.

Blevins Valley Substation Report - Circuit 3 - Stulltown

PSC Reliability Report for 2013						
Substation name - Blevins Valley						
Substation Number - E100						
Circuit Name - Blevins Valley Circuit 3 - Stulltown Road						
Circuit Location - Town - Preston, Ky.						
Road - Blevins Valley/Stulltown Road						
County - Bath County, Kentucky						
General location - Southern Bath County						
Total Circuit Length 13.64 miles						
Customer count for this circuit - 115						
Date of last Circuit Trim - Prior to 2009						
Date	CAIDI	SAIDI	SAIFI			
2008	261	297	1.14			
2009	109	96	0.88			
2010	73	21	0.29			
2011	57	50	0.87			
2012	148	413	2.8			
2013	126	257	2.04			
5 yr average	130	175	1.20			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
2/25/13	14	20	1200	86	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
7/1/13	1	4	214	213	410 Corrosion/Abrasion of Material/Equipment	510 Transformer fuse or breaker
10/6/13	105	172	10290	98	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
3/5/13	39	76	4563	117	440 Trees With Ice/Snow	999 No Equipment failure
12/8/13	38	149	8968	236	440 Trees With Ice/Snow	999 No Equipment failure
12/1/13	15	26	1530	102	601 Squirrel	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			SAIDI			
			26765	4.48%	300 Material or Equipment Fault/Failure	
				0.80%	410 Corrosion/Abrasion of Material/Equipment	
				38.45%	430 Tree failure from overhang or dead tree without ice/snow	
				50.55%	440 Trees With Ice/Snow	
				5.72%	601 Squirrel	
<p>Corrective action plan for Blevins Valley Sub. - Circuit 3 Stulltown Rd.</p> <p>Blevins Valley - Circuit 3 is a small circuit with few members making it easy for a few large outages to affect the SAIDI or SAIFI indices. Clark Energy plans to include Blevins Valley in the 2015 ROW substations due for clearing. Clark Energy is aware that a problem exists with porcelain cutouts and is systematically replacing them. We also continue to add animal guards to all equipment we install with some retrofitting when we work on equipment poles.</p>						

Bowen Substation - Circuit 3 - North Fork/Cane Creek

PSC Reliability Report for 2013						
Substation name - Bowen						
Substation Number - E5B						
Circuit Name - Circuit 3 - North Fork/Cane Creek						
Circuit Location - Town - Bowen, Ky.						
Road - North Fork Road/Cane Creek Road						
County - Powell County, Ky						
General location - Southeastern Powell County						
Total Circuit Length - 57 miles						
Customer count for this circuit - 470						
Date of last Circuit Trim - Prior to 2009						
Date	CAIDI	SAIDI	SAIFI			
2008	115	59	0.52			
2009	85	124	1.46			
2010	288	139	0.48			
2011	106	153	1.45			
2012	165	153	0.93			
2013	84	295	3.49			
5 yr average	119	95	0.78			
Outage date	CustomersAffected	CustomerHours	in Minutes	Duration in Minutes	Cause	Equipment/Material Failure
3/4/13	2	5	280	141	100 Construction	999 No Equipment failure
1/29/13	3	30	1800	26	110 Maintenance	999 No Equipment failure
9/11/13	20		0	86	110 Maintenance	999 No Equipment failure
1/2/13	1	12	720	77	340 Overload	999 No Equipment failure
3/21/13	4		0	99	340 Overload	999 No Equipment failure
3/22/13	2		0	131	340 Overload	500 Transformer bad
1/8/13	43	127	7620	221	400 Decay/Age of Material/Equipment	300 Line conductor
7/22/13	1		0	148	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
6/3/13	2	33	1980	64	420 Tree Growth	999 No Equipment failure
6/13/13	1		0	227	420 Tree Growth	999 No Equipment failure
8/19/13	29		0	55	420 Tree Growth	999 No Equipment failure
4/12/13	96	1403	84180	142	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/19/13	1		0	78	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/28/13	1		0	37	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	96		0	212	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1		0	297	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/18/13	13		0	151	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/20/13	31		0	180	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/25/13	24		0	159	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/6/13	96		0	164	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/9/13	2		0	275	430 Tree failure from overhang or dead tree without ice/snow	300 Line conductor
8/11/13	9		0	154	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
9/10/13	1		0	76	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/22/13	427		0	48	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
2/2/13	30	84	5055	208	440 Trees With Ice/Snow	999 No Equipment failure
1/9/13	43	82	4920	140	490 Maintenance, Other	320 Splice or dead end
6/28/13	1		0	82	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
3/18/13	8	259	15540	122	500 Lightning	999 No Equipment failure
3/18/13	2		0	98	500 Lightning	999 No Equipment failure
3/18/13	11		0	83	500 Lightning	999 No Equipment failure

Bowen Substation - Circuit 3 - North Fork/Cane Creek

3/18/13	3		0	30	500 Lightning	999 No Equipment failure
5/21/13	1		0	55	500 Lightning	999 No Equipment failure
6/9/13	1		0	39	500 Lightning	999 No Equipment failure
6/9/13	1		0	41	500 Lightning	999 No Equipment failure
6/13/13	5		0	237	500 Lightning	999 No Equipment failure
6/17/13	429		0	27	500 Lightning	999 No Equipment failure
6/18/13	3		0	162	500 Lightning	999 No Equipment failure
3/26/13	1	2	127	127	601 Squirrel	999 No Equipment failure
6/4/13	1	1	36	35	610 Large Animal	999 No Equipment failure
10/18/13	1	1	52	52	611 Cattle Rubbing	999 No Equipment failure
3/12/13	21	37	2220	82	710 Motor Vehicle	999 No Equipment failure
5/13/13	3		0	89	710 Motor Vehicle	999 No Equipment failure
6/12/13	2		0	106	710 Motor Vehicle	999 No Equipment failure
11/4/13	2	2	140	70	740 Public Cuts Tree	999 No Equipment failure
3/19/13	1	16	960	32	999 Cause Unknown	999 No Equipment failure
6/6/13	9		0	90	999 Cause Unknown	999 No Equipment failure
10/26/13	2		0	28	999 Cause Unknown	490 Underground, other
	259					
			SAIDI			
			12563D	0.22%	100 Construction	
				1.43%	110 Maintenance	
				0.57%	340 Overload	
				6.07%	400 Decay/Age of Material/Equipment	
				1.58%	420 Tree Growth	
				67.01%	430 Tree failure from overhang or dead tree without ice/snow	
				4.02%	440 Trees With Ice/Snow	
				3.92%	490 Maintenance, Other	
				12.37%	500 Lightning	
				0.10%	601 Squirrel	
				0.03%	610 Large Animal	
				0.04%	611 Cattle Rubbing	
				1.77%	710 Motor Vehicle	
				0.11%	740 Public Cuts Tree	
				0.76%	999 Cause Unknown	
<p>Corrective action plan for Bowen - Circuit 3 - North Fork/Cane Creek Road Bowen Substation - Most of Circuit 3's outages are caused from trees falling out of the ROW. This station is in the eastern part of our system and is heavily wooded. Clark Energy plans to include Bowen Substation in the 2015 ROW substations due for clearing.</p>						

Bowen Substation - Cow Creek Road

PSC Reliability Report for 2013						
Substation name - Bowen						
Substation Number - ES8						
Circuit Name - Circuit 2 Cow Creek						
Circuit Location - Town - Bowen, Ky.						
Road - Hwy 15/Cow Creek Road						
County - Powell County, Ky						
General location - Southeastern Powell County						
Total Circuit Length 15 miles						
Customer count for this circuit - 92						
Date of last Circuit Trim - Prior to 2009						
Date	CAIDI	SAIDI	SAIFI			
2008	170	211	1.24			
2009	130	153	1.1			
2010	143	82	0.58			
2011	177	552	3.12			
2012	71	126	1.77			
2013	178	376	2.11			
5 yr average	138	225	1.56			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
1/30/13	1	1	51	51	510 Wind, Not Trees	999 No Equipment failure
6/1/13	2	2	112	56	400 Decay/Age of Material/Equipment	300 Line conductor
7/3/13	1	1	37	37	740 Public Cuts Tree	999 No Equipment failure
7/22/13	73	294	17665	248	490 Maintenance, Other	370 Recloser or sectionalizer (damaged, malfunction, maintenance)
9/24/13	3	5	279	93	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/17/13	8	26	1536	191	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/7/13	3	8	459	153	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/8/13	63	122	7295	136	440 Trees With Ice/Snow	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			SAIDI			
			27434	0.19%	510 Wind, Not Trees	
				0.41%	400 Decay/Age of Material/Equipment	
				0.13%	740 Public Cuts Tree	
				64.39%	490 Maintenance, Other	
				1.02%	430 Tree failure from overhang or dead tree without ice/snow	
				5.60%	430 Tree failure from overhang or dead tree without ice/snow	
				1.67%	430 Tree failure from overhang or dead tree without ice/snow	
				26.59%	440 Trees With Ice/Snow	
<p>Corrective action plan for Bowen - Circuit 2 Cow Creek Road Bowen Substation - Circuit 2 is a small circuit with few members making it easy for a few large outages to affect the SAIDI or SAIFI indices. Clark Energy plans to include Bowen Substation in the 2015 ROW substations due for clearing.</p>						

Clay City Sub - Circuit 2, Hwy 82 Snow Creek

PSC Reliability Report for 2013						
Substation name - Clay City						
Substation Number - E71						
Circuit Name - Circuit 2 Hwy 82-Snow Creek Road						
Circuit Location - Town - Clay City, Ky.						
Road - Hwy 15 - Lofty Heights - Hwy 82 - Snow Creek Road						
County - Powell County, Ky						
General location - Central Powell County, Kentucky						
Total Circuit Length 29.44 miles						
Customer count for this circuit - 536						
Date of last Circuit Trim - 2011						
Date	CAIDI	SAIDI	SAIFI			
2008	170	211	1.24			
2009	130	153	1.1			
2010	143	82	0.58			
2011	177	552	3.12			
2012	71	126	1.77			
2013	178	376	2.11			
5 yr average	138	225	1.56	1026		
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
1/9/13	1	11	660	78	100 Construction	999 No Equipment failure
3/26/13	1	0	0	111	100 Construction	999 No Equipment failure
3/26/13	3	0	0	159	100 Construction	999 No Equipment failure
3/6/13	1	1	37	37	440 Trees With Ice/Snow	999 No Equipment failure
3/14/13	1	1	62	62	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
4/12/13	1	2	133	133	110 Maintenance	600 Secondary or service conductor
4/14/13	1	1	53	53	600 Small Animal/Bird	999 No Equipment failure
6/13/13	22	1026	61560	371	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/26/13	460	0	0	56	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/10/13	5	0	0	60	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/8/13	2	0	0	178	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/14/13	366	161	9660	25	500 Lightning	999 No Equipment failure
8/31/13	2	0	0	48	500 Lightning	999 No Equipment failure
9/4/13	3	5	288	96	490 Maintenance, Other	999 No Equipment failure
9/9/13	4	4	252	64	100 Construction	999 No Equipment failure
9/13/13	1	1	71	70	999 Cause Unknown	999 No Equipment failure
10/22/13	2	181	10860	143	710 Motor Vehicle	999 No Equipment failure
11/16/13	458	0	0	23	710 Motor Vehicle	999 No Equipment failure
12/22/13	5	11	630	126	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
			Total Minutes			
			84266			
			0.78%	100 Construction		
			0.16%	110 Maintenance		
			0.07%	300 Material or Equipment Fault/Failure		
			0.04%	440 Trees With Ice/Snow		
			73.05%	430 Tree failure from overhang or dead tree without ice/snow		
			0.34%	490 Maintenance, Other		

Clay City Sub - Circuit 2, Hwy 82 Snow Creek

				11.46%	500 Lightning	
				0.06%	600 Small Animal/Bird	
				12.89%	710 Motor Vehicle	
				0.08%	999 Cause Unknown	
<p>Corrective action plan for Clay City - Circuit 2 - Hwy 82-Snow Creek - Two large outages caused both SAIDI and SAIFI to be over the 5 year average. Clark Energy will strive to keep outages as short as possible while maintaining a safe work environment.</p>						

Clay City Substation - Circuit 4 - Hwy 11/Beech Fork Road

PSC Reliability Report for 2013						
Substation name - Clay City						
Substation Number - E71						
Circuit Name - Circuit 4 Hwy 11-Beechfork Road						
Circuit Location - Town - Clay City, Ky.						
Road - Skinner Branch/Beechfork/Pompiil Road						
County - Powell County, Ky						
General location - Central Powell County, Kentucky						
Total Circuit Length 34.75 miles						
Customer count for this circuit - 765						
Date of last Circuit Trim - 2011						
Date	CAIDI	SAIDI	SAIFI			
2008	90	38	0.42			
2009	111	26	0.23			
2010	65	8	0.12			
2011	135	367	2.71			
2012	127	198	1.56			
2013	108	497	4.62			
5 yr average	106	127	1.01			
Dutage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
2/13/13	1	65	3900	158	100 Construction	999 No Equipment failure
2/21/13	1	0	0	151	100 Construction	999 No Equipment failure
2/27/13	2	0	0	227	100 Construction	999 No Equipment failure
2/28/13	2	0	0	91	100 Construction	999 No Equipment failure
2/28/13	2	0	0	133	100 Construction	999 No Equipment failure
3/28/13	3	0	0	111	100 Construction	290 Poles and fixtures, other
4/5/13	5	0	0	138	100 Construction	999 No Equipment failure
4/5/13	6	0	0	77	100 Construction	999 No Equipment failure
4/8/13	3	0	0	64	100 Construction	999 No Equipment failure
9/16/13	4	0	0	54	100 Construction	999 No Equipment failure
9/17/13	4	0	0	98	100 Construction	999 No Equipment failure
9/25/13	3	0	0	100	100 Construction	999 No Equipment failure
11/11/13	2	0	0	42	100 Construction	999 No Equipment failure
2/21/13	2	17	1020	75	110 Maintenance	999 No Equipment failure
3/15/13	17	0	0	15	110 Maintenance	300 Line conductor
3/29/13	3	0	0	181	110 Maintenance	999 No Equipment failure
5/31/13	2	0	0	33	110 Maintenance	999 No Equipment failure
2/6/13	10	6	360	14	300 Material or Equipment Fault/Failure	310 Connector or clamp
3/4/13	4	0	0	67	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
7/7/13	2	1	60	40	340 Overload	999 No Equipment failure
5/30/13	2	7	420	201	400 Decay/Age of Material/Equipment	220 Anchor or guy
6/21/13	1	1	60	68	420 Tree Growth	999 No Equipment failure
3/25/13	2	313	18780	66	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	58	0	0	87	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	46	0	0	149	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/18/13	58	0	0	97	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/29/13	1	0	0	63	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/13/13	7	0	0	151	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure

Clay City Substation - Circuit 4 - Hwy 11/Beech Fork Road

12/10/13	3	6	360	60	490 Maintenance, Other	999 No Equipment failure
12/12/13	3	0	0	55	490 Maintenance, Other	999 No Equipment failure
9/21/13	1	1	60	51	500 Lightning	999 No Equipment failure
11/10/13	6	6	360	27	601 Squirrel	999 No Equipment failure
12/19/13	5	0	0	33	601 Squirrel	999 No Equipment failure
7/1/13	46	46	2760	135	710 Motor Vehicle	999 No Equipment failure
3/8/13	1	5	300	57	999 Cause Unknown	999 No Equipment failure
4/11/13	2	0	0	33	999 Cause Unknown	999 No Equipment failure
6/30/13	2	0	0	48	999 Cause Unknown	999 No Equipment failure
9/3/13	1	0	0	42	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			28440			
				13.71%	100 Construction	
				3.59%	110 Maintenance	
				1.27%	300 Material or Equipment Fault/Failure	
				0.21%	340 Overload	
				1.48%	400 Decay/Age of Material/Equipment	
				0.21%	420 Tree Growth	
				66.03%	430 Tree failure from overhang or dead tree without ice/snow	
				1.27%	490 Maintenance, Other	
				0.21%	500 Lightning	
				1.27%	601 Squirrel	
				9.70%	710 Motor Vehicle	
				1.05%	999 Cause Unknown	
<p>Corrective action plan for Clay City - Circuit 4 - Hwy 11/Beech Fork Road - Work plan and pole change outs caused several of the planned outages for this circuit in 2013 with fewer planned outages expected in 2014. Trees falling out of the ROW corridor continue to be a big contributor to outage numbers. Line Inspection will key on finding trees in the edge of the ROW that might fall.</p>						

Frenchburg Substation - Circuit 2 - McCausey Ridge Road

PSC Reliability Report for 2013						
Substation name - Frenchburg						
Substation Number - E19						
Circuit Name - Circuit 2 McCausey Ridge						
Circuit Location - Town - Frenchburg, Ky.						
Road - Hwy 36/ McCausey Ridge Road						
County - Menifee County, Ky						
General location - Central Menifee County, Eastern Kentucky						
Total Circuit Length 20.26 miles						
Customer count for this circuit - 330						
Date of last Circuit Trim - The whole circuit was trimmed prior to 2009 but yard trees are trimmed on an as needed basis						
Date	CAIDI	SAIDI	SAIFI			
2008		38	4	0.11		
2009		89	23	0.26		
2010		70	169	2.33		
2011		65	19	0.29		
2012		63	37	0.59		
2013		28	42	1.52		
5 yr average		65	50	0.72		
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
12/5/13	1	0.25	15	15	110 Maintenance	999 No Equipment failure
4/9/13	12	203.00	12180	32	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/10/13	79	0.00	0	20	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
5/21/13	292	0.00	0	50	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/23/13	43	0.00	0	8	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/31/13	4	0.00	0	97	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/9/13	7	0.00	0	66	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
5/21/13	2	1.40	84	42	500 Lightning	999 No Equipment failure
12/4/13	1	0.27	16	16	601 Squirrel	999 No Equipment failure
5/21/13	1	0.35	21	21	790 Public, Other	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			12316			
				0.12%	110 Maintenance	
				98.90%	430 Tree failure from overhang or dead tree without ice/snow	
				0.68%	500 Lightning	
				0.13%	601 Squirrel	
				0.17%	790 Public, Other	

Frenchburg Substation - Circuit 2 - McCausey Ridge Road

Corrective action plan for Frenchburg Substation - Circuit 2- McCausey Ridge: No specific action here other than to look for danger trees on our line patrols.						

Frenchburg Substation - Hwy 1274 Scranton

PSC Reliability Report for 2013						
Substation name - Frenchburg						
Substation Number - E19						
Circuit Name - Circuit 4 Hwy 1274/Scranton Road						
Circuit Location - Town - Frenchburg, Ky.						
Road - Hwy 1274/ Scranton Road/Zilpo Campgrounds						
County - Menifee County, Ky						
General location - Eastern Menifee County, Eastern Kentucky						
Total Circuit Length 70.35 miles						
Customer count for this circuit - 1197						
Date of last Circuit Trim - Prior to 2009 but is part of the 2014 ROW plan						
Date	CAIDI	SAIDI	SAIFI			
2008	155	167	1.08			
2009	144	170	1.18			
2010	113	404	3.97			
2011	135	367	2.71			
2012	112	748	6.67			
2013	108	497	4.62			
5 yr average	132	371	3.12			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Mlnutes	Cause	Equipment/Material Failure
3/14/13	5	256	15360	11	100 Construction	999 No Equipment failure
8/20/13	4	0	0	144	100 Construction	999 No Equipment failure
8/27/13	10	0	0	64	100 Construction	360 Fuse cutout (damaged, malfunction, maintenance)
9/4/13	14	0	0	149	100 Construction	999 No Equipment failure
10/9/13	9	0	0	71	100 Construction	999 No Equipment failure
10/16/13	33	0	0	63	100 Construction	999 No Equipment failure
10/21/13	5	0	0	128	100 Construction	999 No Equipment failure
10/29/13	20	0	0	82	100 Construction	999 No Equipment failure
12/4/13	13	0	0	178	100 Construction	999 No Equipment failure
12/4/13	10	0	0	100	100 Construction	999 No Equipment failure
12/13/13	13	0	0	282	100 Construction	999 No Equipment failure
2/6/13	2	121	7260	89	110 Maintenance	999 No Equipment failure
4/25/13	26	0	0	251	110 Maintenance	999 No Equipment failure
5/31/13	3	0	0	29	110 Maintenance	999 No Equipment failure
7/29/13	17	0	0	25	110 Maintenance	999 No Equipment failure
3/1/13	2	6	358	179	300 Material or Equipment Fault/Failure	500 Transformer bad
3/27/13	3	6	360	56	340 Overload	999 No Equipment failure
3/27/13	3	0	0	69	340 Overload	999 No Equipment failure
11/18/13	951	1436	86139	158	360 Other Equipment Installation/Design	320 Splice or dead end
7/15/13	1	4	240	76	400 Decay/Age of Material/Equipment	350 Lightning arrester line
7/16/13	1	0	0	52	400 Decay/Age of Material/Equipment	350 Lightning arrester line
8/21/13	1	0	0	127	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
2/22/13	1	1	49	49	410 Corrosion/Abrasion of Material/Equipment	520 Transformer arrester
6/12/13	1	1	88	88	420 Tree Growth	999 No Equipment failure
1/1/13	2	3724	223440	126	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure

Frenchburg Substation - Hwy 1274 Scranton

1/30/13	53	0	0	87	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
2/11/13	3	0	0	129	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
3/18/13	6	0	0	260	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/30/13	14	0	0	50	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
5/4/13	14	0	0	72	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
5/21/13	4	0	0	64	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	931	0	0	94	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/26/13	162	0	0	301	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/27/13	25	0	0	122	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/7/13	162	0	0	59	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/16/13	1	0	0	78	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/29/13	1	0	0	82	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/19/13	11	0	0	220	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/22/13	124	0	0	102	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/28/13	124	0	0	43	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/31/13	7	0	0	120	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
9/12/13	84	0	0	62	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
9/24/13	21	0	0	74	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/17/13	85	0	0	63	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/17/13	20	0	0	42	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/22/13	90	0	0	418	430 Tree failure from overhang or dead tree without ice/snow	330 Jumper
12/22/13	29	0	0	194	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/22/13	3	0	0	90	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/22/13	5	0	0	31	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/30/13	11	0	0	88	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
1/16/13	959	1751	105060	214	440 Trees With Ice/Snow	999 No Equipment failure
1/16/13	8	0	0	169	440 Trees With Ice/Snow	999 No Equipment failure
12/8/13	83	0	0	217	440 Trees With Ice/Snow	999 No Equipment failure
12/8/13	83	0	0	72	440 Trees With Ice/Snow	999 No Equipment failure
12/8/13	11	0	0	84	440 Trees With Ice/Snow	999 No Equipment failure
12/8/13	14	0	0	100	440 Trees With Ice/Snow	999 No Equipment failure
4/23/13	162	857	51420	563	470 Borrower crew cuts tree	999 No Equipment failure
4/25/13	26	0	0	41	470 Borrower crew cuts tree	999 No Equipment failure
11/8/13	2	24	1440	193	490 Maintenance, Other	500 Transformer bad
12/20/13	4	0	0	189	490 Maintenance, Other	600 Secondary or service conductor
12/27/13	2	0	0	149	490 Maintenance, Other	690 Secondary and service, other
6/10/13	1	141	8460	223	500 Lightning	999 No Equipment failure
6/17/13	4	0	0	354	500 Lightning	999 No Equipment failure
6/26/13	7	0	0	317	500 Lightning	999 No Equipment failure
7/10/13	3	0	0	133	500 Lightning	999 No Equipment failure
7/22/13	2	0	0	56	500 Lightning	999 No Equipment failure
8/31/13	13	0	0	102	500 Lightning	999 No Equipment failure
8/31/13	5	0	0	154	500 Lightning	999 No Equipment failure
9/21/13	28	0	0	71	500 Lightning	999 No Equipment failure
5/10/13	84	152	9120	49	510 Wind, Not Trees	999 No Equipment failure
5/21/13	25	0	0	134	510 Wind, Not Trees	999 No Equipment failure
5/21/13	3	0	0	218	510 Wind, Not Trees	999 No Equipment failure
5/22/13	7	0	0	127	510 Wind, Not Trees	999 No Equipment failure
5/18/13	21	26	1554	74	601 Squirrel	999 No Equipment failure
6/12/13	24	24	1416	59	710 Motor Vehicle	999 No Equipment failure
3/14/13	14	18	1080	38	740 Public Cuts Tree	999 No Equipment failure

Frenchburg Substation - Hwy 1274 Scranton

6/8/13	4	0	0	136	740 Public Cuts Tree	999 No Equipment failure
5/16/13	25	95	5700	43	999 Cause Unknown	999 No Equipment failure
9/4/13	25	0	0	116	999 Cause Unknown	999 No Equipment failure
9/18/13	28	0	0	51	999 Cause Unknown	999 No Equipment failure
9/18/13	5	0	0	56	999 Cause Unknown	999 No Equipment failure
			Total Minutes			Percentage of outage duration
			518544			
				2.96%	100 Construction	
				1.40%	110 Maintenance	
				0.05%	360 Other Equipment Installation/Design	
				0.05%	400 Decay/Age of Material/Equipment	
				0.01%	410 Corrosion/Abrasion of Material/Equipment	
				0.02%	420 Tree Growth	
				43.09%	430 Tree failure from overhang or dead tree without ice/snow	
				20.26%	440 Trees With Ice/Snow	
				9.92%	470 Borrower crew cuts tree	
				0.28%	490 Maintenance, Other	
				1.63%	500 Lightning	
				1.76%	510 Wind, Not Trees	
				0.30%	601 Squirrel	
				0.27%	710 Motor Vehicle	
				0.21%	740 Public Cuts Tree	
				1.10%	999 Cause Unknown	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Corrective action plan for Frenchburg Substation - Circuit 4- Hwy 1274-Scranton. This circuit runs through the Daniel Boone National Forest and is not easily accessed due to dense forest and mountainous terrain. Most of the metering points are seasonal cabins surrounding Cave Run Lake. The right-of-ways are being cleared as part of the 2014 ROW contract. Poles that have to be changed out must be replaced by hand or with specialized equipment such as dozers and tracked vehicles. Distribution automation is being considered for this circuit to see if part of the circuit can be backfed during outages. </div>						

PSC Reliability Report for 2013									
Substation name - Hardwicks Creek	Substation Number - E107	Circuit Name - Circuit 1 Big Hardwicks Creek	Circuit Location - Town - Clay City, Ky.	Road - Hardwicks Creek/Happy Top Road	County - Powell County, Ky	General location - Southwest Powell County, Kentucky	Total Circuit Length, 39.86 miles	Customer count for this circuit - 504	Date of last Circuit Trim - 2011
Date	CAIDI	SAIDI	SAIFI	CustomerHours	In Minutes	Duration In Minutes	Case	Equipment/Material Failure	
2008	131	7	0.05	21	1260	114	100 Construction	999 No Equipment failure	
2009	65	23	0.35	0	0	57	100 Construction	999 No Equipment failure	
2010	65	6	0.09	0	0	168	100 Construction	999 No Equipment failure	
2011	92	216	2.35	0	0	53	100 Construction	999 No Equipment failure	
2012	120	60	0.5	0	0	115	100 Construction	999 No Equipment failure	
2013	45	56	1.25	0	0	42	100 Construction	999 No Equipment failure	
5 yr average	95	62	0.67	0	0	185	110 Maintenance	999 No Equipment failure	
						49	310 Maintenance	999 No Equipment failure	
						73	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)	
						98	400 Decay/Age of Material/Equipment	500 Transformer bad	
						68	400 Tree failure from overhang or dead tree without ice/snow	520 Transformer ancestor	
						30	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure	
						199	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure	
						0	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure	
						122	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)	
						91	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)	
						79	500 Lightning	999 No Equipment failure	
						249	500 Lightning	999 No Equipment failure	
						74	500 Lightning	999 No Equipment failure	
						71	500 Lightning	999 No Equipment failure	
						55	500 Lightning	999 No Equipment failure	
						82	500 Lightning	999 No Equipment failure	
						43	510 Wind, Not Trees	999 No Equipment failure	
						41	600 Small Animal/Bird	999 No Equipment failure	
						149	601 Squirrel	999 No Equipment failure	
						53	601 Squirrel	999 No Equipment failure	
						55	740 Public Cuts Tree	999 No Equipment failure	
						86	999 Cause Unknown	360 Fuse cutout (damaged, malfunction, maintenance)	
						86	999 Cause Unknown	999 No Equipment failure	
						55	999 Cause Unknown	999 No Equipment failure	
							Percentage of outage duration		
						24132	100 Construction		
						5.21%	210 Maintenance		
						1.95%	300 Material or Equipment Fault/Failure		
						0.30%	340 Overload		
						0.87%	400 Decay/Age of Material/Equipment		
						0.26%	430 Tree failure from overhang or dead tree without ice/snow		
						58.68%	490 Maintenance, Other		
						1.45%	500 Lightning		
						21.88%	510 Wind, Not Trees		
						2.85%	600 Small Animal/Bird		
						0.66%	601 Squirrel		
						1.95%	740 Public Cuts Tree		
						1.60%	999 Cause Unknown		
						2.24%	999 Cause Unknown		

Connective action plan for Hardwicks Creek Substation - Circuit 3 - Big Hardwicks Creek Road: Only the SAIFI indices were elevated on this circuit. With almost 59 percent of the outage times coming from trees out of sight-of-way the only way to reduce them is through attentiveness while performing line patrol.

Hinkston Substation - Circuit 3 Mt. View - Stepstone Road

PSC Reliability Report for 2013						
Substation name - Hinkston						
Substation Number - E66						
Circuit Name - Circuit 3 Stepstone - Mt. View subdivision						
Circuit Location - Town - Mt. Sterling, Ky.						
Road - Hinkston Pike- Hwy 60- Stepstone Road - Howards Mill Road						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 19.96 miles						
Customer count for this circuit - 159						
Date of last Circuit Trim - 2013						
Date	CAIDI	SAIDI	SAIFI			
2008	107	189	1.76			
2009	53	66	1.24			
2010	175	230	1.31			
2011	117	229	1.95			
2012	85	186	2.19			
2013	108	256	2.38			
5 yr average	107	180	1.69			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
8/2/13	2	8	480	91	100 Construction	999 No Equipment failure
8/26/13	2	0	0	141	100 Construction	999 No Equipment failure
7/22/13	120	147	8820	71	490 Maintenance, Other	370 Recloser or sectionalizer (damaged, malfunction, maintenance)
9/5/13	3	0	0	98	490 Maintenance, Other	999 No Equipment failure
3/28/13	118	408	24480	126	500 Lightning	999 No Equipment failure
6/13/13	50	0	0	279	500 Lightning	999 No Equipment failure
6/16/13	1	70	4200	60	999 Cause Unknown	999 No Equipment failure
7/21/13	55	0	0	75	999 Cause Unknown	999 No Equipment failure
9/14/13	1	0	0	56	999 Cause Unknown	999 No Equipment failure
		408	Total Minutes		Percentage of outage duration	
			37980			
				1.26%	100 Construction	
				23.22%	490 Maintenance, Other	
				64.45%	500 Lightning	
				11.06%	999 Cause Unknown	
Corrective action plan for Hinkston Substation - Circuit 3 - Stepstone Road - Mt. View -Hwy 82-Snow Creek - Practice good preventive maintenance, perform line patrol as prescribed by the PSC and check any unknown cause to try and find the reason for the outage.						

Hope Substation - Circuit 2 Hope-Means Road

PSC Reliability Report for 2013						
Substation name - Hope						
Substation Number - E2						
Circuit Name - Circuit 2 Hope Means Road						
Circuit Location - Nearest Community - Hope, Ky.						
Road - Hope Means Road - East Fork Road- Clay Lick Road						
County - Montgomery -Menifee -Bath County, Ky.						
General location - Tri County area of Montgomery - Menifee and Bath County Kentucky						
Total Circuit Length 31.67 miles						
Customer count for this circuit - 389						
Date of last Circuit Trim - Prior to 2009						
Date	CAIDI	SAIDI	SAIFI			
2008	67	48	0.72			
2009	76	9	0.12			
2010	74	26	0.35			
2011	49	65	1.33			
2012	83	14	0.17			
2013	48	53	1.11			
5 yr average	70	32	0.54			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
8/1/13	7	11	672	96	100 Construction	999 No Equipment failure
1/25/13	5	253	15180	49	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
1/25/13	2	0	0	108	300 Material or Equipment Fault/Failure	500 Transformer bad
12/15/13	326	0	0	45	300 Material or Equipment Fault/Failure	500 Transformer bad
1/26/13	2	8	8	215	400 Decay/Age of Material/Equipment	300 Line conductor
2/17/13	1	0	0	85	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
4/24/13	2	4	240	64	420 Tree Growth	999 No Equipment failure
5/23/13	1	0	0	90	420 Tree Growth	999 No Equipment failure
6/13/13	7	5	300	22	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/4/13	2	0	0	60	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/11/13	1	1	85	85	490 Maintenance, Other	340 Insulator
8/21/13	1	6	360	159	500 Lightning	999 No Equipment failure
8/21/13	2	0	0	91	500 Lightning	999 No Equipment failure
5/5/13	1	1	36	36	601 Squirrel	999 No Equipment failure
8/4/13	2	1	88	45	610 Large Animal	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			16969			
				3.96%	100 Construction	
				89.46%	300 Material or Equipment Fault/Failure	
				0.05%	400 Decay/Age of Material/Equipment	
				1.41%	420 Tree Growth	
				1.77%	430 Tree failure from overhang or dead tree without ice/snow	
				0.50%	490 Maintenance, Other	
				2.12%	500 Lightning	
				0.21%	601 Squirrel	
				0.21%	610 Large Animal	
Corrective action plan for Hope Substation - Circuit 2 - Hope Means Road - Practice good preventive maintenance, perform line patrol looking for potential problems. Repair defective items ASAP						

Hope Substation - Circuit 3 Spencer Road

PSC Reliability Report for 2013						
Hope	3 - Spencer Pike	95.40	990			
Substation name - Hope						
Substation Number - E2						
Circuit Name - Circuit 3 Spencer Pike						
Circuit Location - Nearest Community - Hope , Ky.						
Road - Spencer Pike-Tapp Lane-Bedford Road						
County - Montgomery County, Ky.						
General location - Southeastern part of Montgomery County Kentucky						
Total Circuit Length 95.40 miles						
Customer count for this circuit - 990 Members						
Date of last Circuit Trim - Prior to 2009						
Date	CAIDI	SAIDI	SAIFI			
2008	104	16	0.15			
2009	70	20	0.28			
2010	177	236	1.33			
2011	64	100	1.56			
2012	96	53	0.55			
2013	63	63	1.01			
5 yr average	102	85	0.77			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
4/22/13	2	22	1320	188	100 Construction	999 No Equipment failure
6/24/13	3	0	0	143	100 Construction	999 No Equipment failure
7/15/13	2	0	0	183	100 Construction	999 No Equipment failure
7/23/13	2	0	0	78	100 Construction	999 No Equipment failure
4/17/13	2	2	120	9	110 Maintenance	999 No Equipment failure
6/3/13	1	0	0	63	110 Maintenance	999 No Equipment failure
5/17/13	12	8	480	41	300 Material or Equipment Fault/Failure	350 Lightning arrester line
11/28/13	5	7	415	82	340 Overload	999 No Equipment failure
1/9/13	47	57	3420	60	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
1/22/13	1	0	0	60	400 Decay/Age of Material/Equipment	310 Connector or clamp
1/28/13	13	0	0	39	400 Decay/Age of Material/Equipment	300 Line conductor
3/10/13	1	0	0	60	400 Decay/Age of Material/Equipment	330 Jumper
5/27/13	1	1	49	49	410 Corrosion/Abrasion of Material/Equipment	310 Connector or clamp
6/26/13	101	103	6180	65	420 Tree Growth	999 No Equipment failure
7/26/13	1	0	0	66	420 Tree Growth	999 No Equipment failure
7/27/13	3	0	0	99	420 Tree Growth	999 No Equipment failure
4/11/13	35	330	19800	223	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/11/13	1	0	0	281	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/1/13	1	0	0	65	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/9/13	23	0	0	46	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/9/13	18	0	0	52	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1	0	0	299	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/14/13	3	0	0	390	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/17/13	139	0	0	26	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/23/13	1	0	0	41	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/11/13	64	0	0	57	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/11/13	1	0	0	72	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/13/13	2	0	0	65	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/23/13	2	0	0	64	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure

Hope Substation - Circuit 3 Spencer Road

8/21/13	10	0	0	40	430 Tree failure from overhang or dead tree without Ice/snow	999 No Equipment failure
8/31/13	1	0	0	45	430 Tree failure from overhang or dead tree without Ice/snow	999 No Equipment failure
11/22/13	1	0	0	72	430 Tree failure from overhang or dead tree without Ice/snow	999 No Equipment failure
6/20/13	1	3	180	44	490 Maintenance, Other	999 No Equipment failure
8/9/13	2	0	0	51	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
6/13/13	1	110	6600	258	500 Lightning	999 No Equipment failure
6/17/13	139	0	0	39	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	37	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	116	500 Lightning	999 No Equipment failure
6/27/13	5	0	0	116	500 Lightning	999 No Equipment failure
9/2/13	1	0	0	43	500 Lightning	999 No Equipment failure
3/5/13	71	83	4970	96	510 Wind, Not Trees	999 No Equipment failure
6/3/13	1	3	180	117	600 Small Animal/Bird	999 No Equipment failure
8/22/13	2	0	0	16	600 Small Animal/Bird	999 No Equipment failure
5/30/13	1	5	300	173	601 Squirrel	999 No Equipment failure
9/9/13	1	0	0	81	601 Squirrel	999 No Equipment failure
10/23/13	2	0	0	32	601 Squirrel	999 No Equipment failure
5/24/13	2	180	10800	100	999 Cause Unknown	999 No Equipment failure
6/26/13	101	0	0	79	999 Cause Unknown	999 No Equipment failure
7/7/13	5	0	0	85	999 Cause Unknown	999 No Equipment failure
8/5/13	5	0	0	40	999 Cause Unknown	999 No Equipment failure
8/16/13	1	0	0	42	999 Cause Unknown	999 No Equipment failure
8/22/13	29	0	0	68	999 Cause Unknown	999 No Equipment failure
					Percentage of outage duration	
					Total Minutes	
					54814	
					2.41%	
					100 Construction	
					0.22%	
					110 Maintenance	
					0.88%	
					300 Material or Equipment Fault/Failure	
					0.76%	
					340 Overload	
Corrective action plan for Hope Substation - Circuit 3 - Spencer Pike - - Hope Substation has been put on the list for ROW clearing in 2014-15. Clark Energy plans on practicing good preventive maintenance, perform line patrol looking for potential problems. Repair defective items ASAP					6.24%	
					400 Decay/Age of Material/Equipment	
					0.09%	
					410 Corrosion/Abrasion of Material/Equipment	
					11.27%	
					420 Tree Growth	
					36.12%	
					430 Tree failure from overhang or dead tree without Ice/snow	
					0.33%	
					490 Maintenance, Other	
					12.04%	
					500 Lightning	
					9.07%	
					510 Wind, Not Trees	
					0.33%	
					600 Small Animal/Bird	
					0.55%	
					601 Squirrel	
					19.70%	
					999 Cause Unknown	

Hunt Substation - Circuit 3 Muddy Creek Road

PSC Reliability Report for 2013						
Substation name - Hunt						
Substation Number - N1						
Circuit Name - Circuit 1 Muddy Creek Road						
Circuit Location - Town - Winchester, Ky.						
Road - Muddy Creek - Cole Road - Dry Fork Road						
County - Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 43.32 miles						
Customer count for this circuit - 402 members						
Date of last Circuit Trim - 2010						
Date	CAIDI	SAIDI	SAIFI			
2008	68	16	0.24			
2009	118	45	0.38			
2010	68	90	1.31			
2011	107	47	0.43			
2012	37	47	1.28			
2013	62	88	1.42			
5 yr average	80	49	0.73			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
9/25/13	2	36	2160	483	100 Construction	999 No Equipment failure
9/30/13	1	0	0	110	100 Construction	999 No Equipment failure
10/10/13	2	0	0	139	100 Construction	999 No Equipment failure
10/15/13	2	0	18	9	100 Construction	999 No Equipment failure
10/21/13	1	0	0	130	100 Construction	999 No Equipment failure
10/22/13	1	0	0	119	100 Construction	999 No Equipment failure
11/4/13	2	0	0	205	100 Construction	999 No Equipment failure
11/7/13	1	0	0	60	100 Construction	999 No Equipment failure
11/14/13	1	0	0	51	100 Construction	999 No Equipment failure
5/20/13	3	12	720	82	110 Maintenance	999 No Equipment failure
6/17/13	6	0	0	62	110 Maintenance	999 No Equipment failure
10/7/13	1	0	0	116	110 Maintenance	999 No Equipment failure
12/15/13	4	5	324	81	340 Overload	999 No Equipment failure
1/23/13	3	12	720	197	400 Decay/Age of Material/Equipment	300 Line conductor
5/13/13	1	0	0	138	400 Decay/Age of Material/Equipment	500 Transformer bad
6/26/13	4	6	340	85	420 Tree Growth	999 No Equipment failure
6/16/13	6	14	822	136	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
9/23/13	4	7	420	26	490 Maintenance, Other	999 No Equipment failure
10/4/13	3	0	0	102	490 Maintenance, Other	999 No Equipment failure
5/10/13	1	68	4080	53	500 Lightning	999 No Equipment failure
6/13/13	4	0	0	88	500 Lightning	999 No Equipment failure
6/18/13	4	0	0	116	500 Lightning	999 No Equipment failure
6/22/13	4	0	0	62	500 Lightning	999 No Equipment failure
6/26/13	13	0	0	157	500 Lightning	999 No Equipment failure
6/26/13	1	0	0	356	500 Lightning	999 No Equipment failure
6/27/13	3	0	0	117	500 Lightning	999 No Equipment failure
7/2/13	2	0	0	97	500 Lightning	999 No Equipment failure
10/31/13	11	19	1111	101	510 Wind, Not Trees	999 No Equipment failure
4/25/13	1	8	480	23	600 Small Animal/Bird	999 No Equipment failure

Hunt Substation - Circuit 3 Muddy Creek Road

5/25/13	2	0	0	63	600 Small Animal/Bird	999 No Equipment failure
9/29/13	13	0	0	27	600 Small Animal/Bird	999 No Equipment failure
1/14/13	4	3	188	47	710 Motor Vehicle	999 No Equipment failure
6/6/13	358	298	17900	50	800 Other	999 No Equipment failure
4/29/13	3	34	2040	64	999 Cause Unknown	999 No Equipment failure
5/17/13	3	0	0	54	999 Cause Unknown	999 No Equipment failure
5/19/13	3	0	0	79	999 Cause Unknown	999 No Equipment failure
8/11/13	1	0	0	71	999 Cause Unknown	999 No Equipment failure
9/13/13	1	0	0	43	999 Cause Unknown	999 No Equipment failure
9/29/13	11	0	0	52	999 Cause Unknown	999 No Equipment failure
9/30/13	13	0	0	55	999 Cause Unknown	999 No Equipment failure
11/4/13	1	0	0	53	999 Cause Unknown	999 No Equipment failure
		Total Minutes			Percentage of outage duration	
			31323			
				6.90%	100 Construction	
				2.30%	110 Maintenance	
				1.03%	340 Overload	
				2.30%	400 Decay/Age of Material/Equipment	
				1.09%	420 Tree Growth	
				2.62%	430 Tree failure from overhang or dead tree without ice/snow	
				1.34%	490 Maintenance, Other	
				13.03%	500 Lightning	
				3.55%	510 Wind, Not Trees	
				1.53%	600 Small Animal/Bird	
				0.60%	710 Motor Vehicle	
				57.15%	800 Other	
				6.51%	999 Cause Unknown	

Corrective action plan for Hunt Substation - Circuit 1 - Muddy Creek Practice good preventive maintenance, perform line patrol on a as prescribed by the PSC and check any unknown cause to try and find the reason for the outage.

Hunt Substation - Circuit 3 - College Hill Road

PSC Reliability Report for 2013						
Substation name - Hunt						
Substation Number - N1						
Circuit Name - Circuit 3 College Hill Road						
Circuit Location - Town - Richmond-Waco, Ky.						
Road - Jackson Ferry Road - College Hill Road - Flint Road - Snowden lane						
County - Clark/Madison County, Ky						
General location - Southern Clark County/Northern Madison County						
Total Circuit Length 76.70 miles						
Customer count for this circuit - 743 members						
Date of last Circuit Trim - 2010						
Date	CAIDI	SAIDI	SAIFI			
2008	112	47	0.42			
2009	166	68	0.41			
2010	92	57	0.62			
2011	94	336	3.58			
2012	105	125	1.19			
2013	75	217	2.88			
5 yr average	114	127	1.24			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
5/29/13	635	433	25980	39	100 Construction	999 No Equipment failure
11/27/13	12	0	0	101	100 Construction	999 No Equipment failure
12/7/13	4	13	780	25	340 Overload	999 No Equipment failure
12/14/13	3	0	0	136	340 Overload	999 No Equipment failure
12/22/13	1	0	0	229	340 Overload	500 Transformer bad
11/30/13	1	3	182	182	400 Decay/Age of Material/Equipment	500 Transformer bad
6/2/13	6	8	486	81	410 Corrosion/Abrasion of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
7/9/13	1	3	180	82	420 Tree Growth	999 No Equipment failure
10/31/13	7	0	0	20	420 Tree Growth	999 No Equipment failure
2/1/13	2	47	2820	143	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/26/13	9	0	0	194	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/31/13	1	0	0	146	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/3/13	4	0	0	146	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/8/13	2	0	0	24	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/8/13	7	5	273	39	440 Trees With Ice/Snow	999 No Equipment failure
3/18/13	637	1765	105900	133	500 Lightning	999 No Equipment failure
4/11/13	480	0	0	43	500 Lightning	999 No Equipment failure
4/17/13	1	0	0	102	500 Lightning	999 No Equipment failure
6/16/13	1	0	0	119	500 Lightning	999 No Equipment failure
9/11/13	4	0	0	98	500 Lightning	999 No Equipment failure
11/15/13	1	0	0	91	500 Lightning	999 No Equipment failure
5/22/13	1	3	161	161	510 Wind, Not Trees	999 No Equipment failure
4/25/13	6	13	780	49	999 Cause Unknown	999 No Equipment failure
6/16/13	4	0	0	91	999 Cause Unknown	999 No Equipment failure
11/23/13	1	0	0	134	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			137542			
				18.89%	100 Construction	

Hunt Substation - Circuit 3 - College Hill Road

Corrective action plan for Hunt Substation - Circuit 1 - Muddy Creek Practice good preventive maintenance, perform line patrol on a as prescribed by the PSC and check any unknown cause to try and find the reason for the outage.		0.57%	340 Overload	
		0.13%	400 Decay/Age of Material/Equipment	
		0.35%	410 Corrosion/Abrasion of Material/Equipment	
		0.13%	420 Tree Growth	
		2.05%	430 Tree failure from overhang or dead tree without ice/snow	
		0.20%	440 Trees With Ice/Snow	
		76.99%	500 Lightning	
		0.12%	510 Wind, Not Trees	
		0.57%	999 Cause Unknown	

Jeffersonville Substation - Circuit 1 - Hwy 599

PSC Reliability Report for 2013						
Substation name - Jeffersonville Substation						
Substation Number - E87						
Circuit Name - Circuit 1 Hwy 599						
Circuit Location - Town - Mt. Sterling, Ky.						
Road - Hwy 599						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 61.17 miles						
Customer count for this circuit - 958						
Date of last Circuit Trim - Full circuit trim prior to 2009 but trimming done on an as needed basis						
Date	CAIDI	SAIDI	SAIFI			
2008	61	10	0.17			
2009	62	68	1.09			
2010	127	40	0.31			
2011	89	43	0.48			
2012	84	127	1.5			
2013	58	114	1.97	510		
5 yr average	85	58	0.71			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
7/10/13	1355	903	54200	40	000 Power Supply	999 No Equipment failure
1/17/13	2	23	1380	60	100 Construction	999 No Equipment failure
2/26/13	2	0	0	32	100 Construction	999 No Equipment failure
4/22/13	6	0	0	85	100 Construction	999 No Equipment failure
7/30/13	2	0	0	129	100 Construction	999 No Equipment failure
8/1/13	6	0	0	68	100 Construction	999 No Equipment failure
11/15/13	1	0	0	18	100 Construction	999 No Equipment failure
5/2/13	2	22	1320	25	110 Maintenance	490 Underground, other
7/2/13	6	0	0	178	110 Maintenance	999 No Equipment failure
10/23/13	5	0	0	35	110 Maintenance	999 No Equipment failure
1/14/13	4	5	320	145	300 Material or Equipment Fault/Failure	500 Transformer bad
2/10/13	1	669	40140	69	400 Decay/Age of Material/Equipment	350 Lightning arrester line
4/9/13	481	0	0	106	400 Decay/Age of Material/Equipment	300 Line conductor
7/16/13	2	0	0	28	400 Decay/Age of Material/Equipment	350 Lightning arrester line
7/18/13	1	0	0	52	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
8/5/13	1	7	420	77	420 Tree Growth	999 No Equipment failure
10/31/13	5	0	0	337	420 Tree Growth	999 No Equipment failure
1/29/13	1	510	30600	79	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/19/13	6	0	0	134	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1	0	0	435	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/17/13	13	0	0	183	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/27/13	29	0	0	123	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/28/13	6	0	0	222	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/10/13	1	0	0	89	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/17/13	1	0	0	191	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/9/13	49	0	0	274	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/5/13	1	0	0	118	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/11/13	1	0	0	156	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/31/13	2	0	0	57	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/7/13	49	0	0	20	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure

Jeffersonville Substation - Circuit 1 - Hwy 599

12/8/13	1	2	122	122	440 Trees With Ice/Snow	999 No Equipment failure
7/1/13	1	463	27780	110	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
7/22/13	34	0	0	139	490 Maintenance, Other	999 No Equipment failure
9/22/13	1	0	0	61	490 Maintenance, Other	999 No Equipment failure
10/30/13	18	0	0	49	490 Maintenance, Other	370 Recloser or sectionalizer (damaged, malfunction, maintenance)
11/7/13	829	0	0	170	490 Maintenance, Other	300 Line conductor
6/9/13	2	58	3480	67	500 Lightning	999 No Equipment failure
6/9/13	1	0	0	83	500 Lightning	999 No Equipment failure
6/9/13	1	0	0	46	500 Lightning	999 No Equipment failure
7/10/13	4	0	0	87	500 Lightning	999 No Equipment failure
7/10/13	4	0	0	108	500 Lightning	999 No Equipment failure
8/3/13	6	0	0	59	500 Lightning	999 No Equipment failure
8/21/13	26	0	0	78	500 Lightning	999 No Equipment failure
8/21/13	1	0	0	50	500 Lightning	999 No Equipment failure
6/12/13	2	2	112	57	600 Small Animal/Bird	999 No Equipment failure
3/13/13	4	7	420	59	999 Cause Unknown	999 No Equipment failure
11/17/13	2	0	0	51	999 Cause Unknown	999 No Equipment failure
12/17/13	1	0	0	62	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			160294			
				33.81%	000 Power Supply	
				0.86%	100 Construction	
				0.82%	110 Maintenance	
				0.20%	300 Material or Equipment Fault/Failure	
				25.04%	400 Decay/Age of Material/Equipment	
				0.26%	420 Tree Growth	
				19.09%	430 Tree failure from overhang or dead tree without ice/snow	
				0.08%	440 Trees With Ice/Snow	
				17.33%	490 Maintenance, Other	
				2.17%	500 Lightning	
				0.07%	600 Small Animal/Bird	
				0.26%	999 Cause Unknown	

Corrective action plan for Jeffersonville Substation - Circuit 1 - Hwy 599/Cream Ally/Hwy 213 - Practice good preventive maintenance, perform line patrol looking for danger trees in the edge of the ROW. Add this substation to the ROW clearing plan for 2015

Miller Hunt Substation - Circuit 1 - Miller Hunt Road

PSC Reliability Report for 2013						
Substation name - Miller Hunt						
Substation Number - N71						
Circuit Name - Circuit 1 Miller Hunt Road						
Circuit Location - Town - Winchester, Ky.						
Road - Miller Hunt Road/Hwy 15/Stoner Ephesus Road						
County - Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 38.77 miles						
Customer count for this circuit - 349						
Date of last Circuit Trim - Full trim prior to 2009 but areas addressed as needed						
Date	CAIDI	SAIDI	SAIFI			
2008	80	29	0.36			
2009	92	56	0.61			
2010	158	100	0.63			
2011	86	215	2.49			
2012	67	99	1.47			
2013	115	187	1.62			
5 yr average	97	100	1.11			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
3/14/13	30	31	1860	60	100 Construction	999 No Equipment failure
11/27/13	1	0	0	81	100 Construction	999 No Equipment failure
9/23/13	2	4	230	115	400 Decay/Age of Material/Equipment	999 No Equipment failure
5/21/13	41	176	10560	164	420 Tree Growth	999 No Equipment failure
7/14/13	2	0	0	55	420 Tree Growth	999 No Equipment failure
7/23/13	2	0	0	190	420 Tree Growth	999 No Equipment failure
10/31/13	29	0	0	66	420 Tree Growth	999 No Equipment failure
10/31/13	5	0	0	32	420 Tree Growth	999 No Equipment failure
11/12/13	5	0	0	259	420 Tree Growth	999 No Equipment failure
6/10/13	2	62	3720	94	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/28/13	7	0	0	117	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/21/13	29	0	0	93	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/31/13	314	644	38622	123	510 Wind not trees	999 No Equipment failure
4/17/13	2	38	2280	76	500 Lightning	999 No Equipment failure
5/18/13	5	0	0	45	500 Lightning	999 No Equipment failure
6/13/13	1	0	0	150	500 Lightning	999 No Equipment failure
6/27/13	5	0	0	335	500 Lightning	999 No Equipment failure
8/7/13	5	0	0	171	500 Lightning	999 No Equipment failure
1/26/13	1	16	960	40	999 Cause Unknown	999 No Equipment failure
6/1/13	12	0	0	36	999 Cause Unknown	999 No Equipment failure
12/17/13	8	0	0	33	999 Cause Unknown	999 No Equipment failure
12/28/13	4	0	0	53	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			58232			
				3.19%	100 Construction	
				0.39%	400 Decay/Age of Material/Equipment	
				18.13%	420 Tree Growth	
				6.39%	430 Tree failure from overhang or dead tree without ice/snow	
				66.32%	510 Wind not trees	
Corrective action plan for Miller Hunt Substation - Circuit 1 - Miller Hunt Road - Practice good preventive maintenance and patrol lines as needed. This substation is due for ROW clearing in 2015.						

Miller Hunt Substation - Circuit 1 - Miller Hunt Road

				3.92%	500 Lightning	
				1.65%	999 Cause Unknown	

Miller Hunt Substation - Circuit 2 - Hwy 89

PSC Reliability Report for 2013						
Substation name - Miller Hunt						
Substation Number - N71						
Circuit Name - Circuit 2 Hwy 89 (Irvine Road)						
Circuit Location - Town - Winchester, Ky.						
Road - Hwy 89/Ruckerville Road/White-Conkright Road/Agawam Road						
County - Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 29.14 miles						
Customer count for this circuit - 320						
Date of last Circuit Trim - Prior to 2009 but circuit has been trimmed on an as needed basis						
Date	CAIDI	SAIDI	SAIFI			
2008	63	30	0.48			
2009	93	24	0.25			
2010	88	73	0.83			
2011	133	209	1.57			
2012	97	41	0.42			
2013	136	180	1.33			
5 yr average	95	75	0.71			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
10/23/13	3	19	1140	60	400 Decay/Age of Material/Equipment	310 Connector or clamp
11/28/13	11	0	0	233	400 Decay/Age of Material/Equipment	500 Transformer bad
6/21/13	2	57	3420	101	420 Tree Growth	999 No Equipment failure
7/18/13	11	0	0	131	420 Tree Growth	999 No Equipment failure
11/6/13	30	0	0	60	420 Tree Growth	999 No Equipment failure
5/19/13	2	668	40080	67	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/4/13	270	0	0	148	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1	55	3300	123	500 Lightning	999 No Equipment failure
6/26/13	2	0	0	113	500 Lightning	999 No Equipment failure
8/3/13	8	0	0	149	500 Lightning	999 No Equipment failure
8/31/13	1	0	0	131	500 Lightning	999 No Equipment failure
9/1/13	2	0	0	420	500 Lightning	500 Transformer bad
9/11/13	11	0	0	54	500 Lightning	999 No Equipment failure
9/11/13	1	0	0	180	500 Lightning	999 No Equipment failure
12/22/13	2	9	556	278	510 Wind, Not Trees	999 No Equipment failure
5/1/13	1	2	149	149	710 Motor Vehicle	999 No Equipment failure
			Total Minutes	Percentage of outage duration		
			48645			
Corrective action plan for Miller Hunt Substation - Circuit 2 - Hwy 89 (Irvine Road) - Practice good preventive maintenance and patrol lines as needed. This substation is due for ROW clearing in 2015.				2.34%	400 Decay/Age of Material/Equipment	
				7.03%	420 Tree Growth	
				82.39%	430 Tree failure from overhang or dead tree without ice/snow	
				6.78%	420 Tree Growth	
				1.14%	500 Lightning	
				0.02%	510 Wind, Not Trees	
				0.31%	710 Motor Vehicle	

Mt. Sterling Substation - Circuit 2 Levee/Hwy 11/Cream Alley

PSC Reliability Report for 2013						
Substation name - Mount Sterling Substation						
Substation Number - N32						
Circuit Name - Circuit 2 Levee Road/Hwy 11						
Circuit Location - Town - Mount Sterling, Ky.						
Road - Levee Road/Hwy 11/Nest Egg/Cream Alley Road						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 65.04 miles						
Customer count for this circuit - 782						
Date of last Circuit Trim - 2013/2014						
Date	CAIDI	SAIDI	SAIFI			
2008	55	94	1.71			
2009	62	57	0.91			
2010	120	67	0.56			
2011	106	149	1.41			
2012	107	80	0.74			
2013	113	165	1.46			
5 yr average	90	89	1.07			
Dutage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
5/20/13	1	37	2220	80	100 Construction	999 No Equipment failure
5/20/13	5	0	0	42	100 Construction	999 No Equipment failure
6/6/13	5	0	0	100	100 Construction	999 No Equipment failure
6/11/13	6	0	0	140	100 Construction	999 No Equipment failure
7/1/13	2	0	0	144	100 Construction	999 No Equipment failure
7/31/13	3	0	0	92	100 Construction	999 No Equipment failure
5/14/13	1	1	85	85	110 Maintenance	200 Pole
2/11/13	2	5	270	134	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
3/4/13	3	9	552	185	340 Overload	500 Transformer bad
4/9/13	672	1475	88500	121	400 Decay/Age of Material/Equipment	300 Line conductor
7/4/13	61	0	0	117	400 Decay/Age of Material/Equipment	330 Jumper
6/26/13	4	8	480	78	420 Tree Growth	999 No Equipment failure
9/1/13	1	0	0	154	420 Tree Growth	999 No Equipment failure
4/12/13	1	159	9540	75	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1	0	0	341	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/18/13	1	0	0	17	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/20/13	116	0	0	173	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	2	0	0	76	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	2	0	0	78	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	1	0	0	125	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/22/13	5	0	0	111	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/3/13	1	0	0	181	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/17/13	4	94	5640	173	500 Lightning	999 No Equipment failure
4/17/13	1	0	0	98	500 Lightning	999 No Equipment failure
5/19/13	1	0	0	62	500 Lightning	999 No Equipment failure
6/17/13	1	0	0	739	500 Lightning	999 No Equipment failure
6/17/13	4	0	0	428	500 Lightning	999 No Equipment failure
6/18/13	2	0	0	70	500 Lightning	999 No Equipment failure
8/21/13	10	0	0	45	500 Lightning	999 No Equipment failure
8/21/13	8	0	0	62	500 Lightning	999 No Equipment failure

Mt. Sterling Substation - Circuit 2 Levee/Hwy 11/Cream Alley

PSC Reliability Report for 2013						
Substation name - Mount Sterling Substation						
Substation Number - N32						
Circuit Name - Circuit 2 Levee Road/Hwy 11						
Circuit Location - Town - Mount Sterling, Ky.						
Road - Levee Road/Hwy 11/Nest Egg/Cream Alley Road						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 65.04 miles						
Customer count for this circuit - 782						
Date of last Circuit Trim - 2013/2014						
Date	CAIDI	SAIDI	SAIFI			
2008	55	94	1.71			
2009	62	57	0.91			
2010	120	67	0.56			
2011	106	149	1.41			
2012	107	80	0.74			
2013	113	165	1.46			
5 yr average	90	89	1.07			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
5/20/13	1	37	2220	80	100 Construction	999 No Equipment failure
5/20/13	5	0	0	42	100 Construction	999 No Equipment failure
6/6/13	5	0	0	100	100 Construction	999 No Equipment failure
6/11/13	6	0	0	140	100 Construction	999 No Equipment failure
7/1/13	2	0	0	144	100 Construction	999 No Equipment failure
7/31/13	3	0	0	92	100 Construction	999 No Equipment failure
5/14/13	1	1	85	85	110 Maintenance	200 Pole
2/11/13	2	5	270	134	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
3/4/13	3	9	552	185	340 Overload	500 Transformer bad
4/9/13	672	1475	88500	121	400 Decay/Age of Material/Equipment	300 Line conductor
7/4/13	61	0	0	117	400 Decay/Age of Material/Equipment	330 Jumper
6/26/13	4	8	480	78	420 Tree Growth	999 No Equipment failure
9/1/13	1	0	0	154	420 Tree Growth	999 No Equipment failure
4/12/13	1	159	9540	75	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	1	0	0	341	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/18/13	1	0	0	17	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/20/13	116	0	0	173	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	2	0	0	76	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	2	0	0	78	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/21/13	1	0	0	125	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/22/13	5	0	0	111	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/3/13	1	0	0	181	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/17/13	4	94	5640	173	500 Lightning	999 No Equipment failure
4/17/13	1	0	0	98	500 Lightning	999 No Equipment failure
5/19/13	1	0	0	62	500 Lightning	999 No Equipment failure
6/17/13	1	0	0	739	500 Lightning	999 No Equipment failure
6/17/13	4	0	0	428	500 Lightning	999 No Equipment failure
6/18/13	2	0	0	70	500 Lightning	999 No Equipment failure
8/21/13	10	0	0	45	500 Lightning	999 No Equipment failure
8/21/13	8	0	0	62	500 Lightning	999 No Equipment failure

Reid Village Substation - Circuit 1 - Sewell Shop

PSC Reliability Report for 2013						
Substation name - Reid Village Substation						
Substation Number - N64						
Circuit Name - Circuit 1 Sewell Shop						
Circuit Location - Town - Reid Village, Ky.						
Road - Hwy 60/Grassy Lick/Thompson Station						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 51.92 miles						
Customer count for this circuit - 497						
Date of last Circuit Trim - Full circuit trim prior to 2009 but circuit has been trimmed on an as needed basis						
Date	CAIDI	SAIDI	SAIFI			
2008	89	47	0.53			
2009	55	47	0.86			
2010	68	72	1.06			
2011	94	70	0.75			
2012	85	28	0.33			
2013	85	103	1.21			
5 yr average	78	53	0.71	245		467
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
5/29/13	2	5	286	143	100 Construction	999 No Equipment failure
12/11/13	1	0	12	12	110 Maintenance	999 No Equipment failure
12/14/13	1	1	59	59	340 Overload	999 No Equipment failure
12/8/13	2	7	390	195	400 Decay/Age of Material/Equipment	500 Transformer bad
4/22/13	1	23	1380	39	420 Tree Growth	999 No Equipment failure
8/28/13	7	0	0	190	420 Tree Growth	999 No Equipment failure
7/20/13	3	9	540	158	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/16/13	1	0	0	68	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/16/13	2	467	28020	117	500 Lightning	999 No Equipment failure
4/17/13	8	0	0	145	500 Lightning	999 No Equipment failure
4/17/13	4	0	0	160	500 Lightning	999 No Equipment failure
7/12/13	2	0	0	33	500 Lightning	999 No Equipment failure
8/3/13	225	0	0	113	500 Lightning	999 No Equipment failure
8/8/13	4	0	0	74	500 Lightning	999 No Equipment failure
12/22/13	5	49	2960	592	510 Wind, Not Trees	999 No Equipment failure
4/11/13	2	12	720	70	600 Small Animal/Bird	999 No Equipment failure
5/6/13	2	0	0	114	600 Small Animal/Bird	999 No Equipment failure
7/31/13	2	0	0	169	600 Small Animal/Bird	999 No Equipment failure
11/26/13	2	2	120	33	601 Squirrel	999 No Equipment failure
12/6/13	2	0	0	35	601 Squirrel	999 No Equipment failure
3/6/13	228	156	9348	41	710 Motor Vehicle	999 No Equipment failure
7/11/13	7	13	780	47	999 Cause Unknown	999 No Equipment failure
11/19/13	11	0	0	45	999 Cause Unknown	999 No Equipment failure
		Total Minutes	44615		Percentage of outage duration	
Corrective action plan for Reid Village Substation - Circuit 1 - Sewell Shop - Practice good preventive maintenance and patrol lines as needed.				0.54%	100 Construction	
				0.03%	110 Maintenance	
				0.13%	340 Overload	
				0.87%	400 Decay/Age of Material/Equipment	

Reid Village Substation - Circuit 1 - Sewell Shop

				3.09%	420 Tree Growth	
				1.21%	430 Tree failure from overhang or dead tree without ice/snow	
				62.80%	500 Lightning	
				6.63%	510 Wind, Not Trees	
				1.61%	600 Small Animal/Bird	
				0.27%	601 Squirrel	
				20.95%	710 Motor Vehicle	
				1.75%	999 Cause Unknown	

Reid Village Substation - Circuit 2 Downtown Reid Village

PSC Reliability Report for 2013						
Substation name - Reid Village Substation						
Substation Number - N64						
Circuit Name - Circuit 2- Reid Village						
Circuit Location - Town - Reid Village, Ky.						
Road - Downtown Reid Village/Hwy 60/The Maple Subdivision/ Prewitt Pike						
County - Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 14.14 miles						
Customer count for this circuit - 404						
Date of last Circuit Trim - Full circuit trim prior to 2009 but circuit has been trimmed on an as needed basis						
Date	CAIDI	SAIDI	SAIFI			
2008	67	3	0.04			
2009	25	27	1.09			
2010	111	64	0.58			
2011	71	22	0.31			
2012	57	27	0.47			
2013	130	70	0.54			
5 yr average	66	29	0.50			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
5/21/13	8	252	15120	112	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/13/13	129	0	0	107	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/26/13	9	0	0	44	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/15/13	2	36	2160	66	500 Lightning	999 No Equipment failure
6/16/13	3	0	0	47	500 Lightning	999 No Equipment failure
6/27/13	15	0	0	112	500 Lightning	999 No Equipment failure
6/27/13	3	0	0	121	500 Lightning	999 No Equipment failure
6/27/13	2	0	0	39	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	47	500 Lightning	999 No Equipment failure
7/21/13	4	4	240	60	600 Small Animal/Bird	999 No Equipment failure
12/19/13	35	163	9800	280	710 Motor Vehicle	999 No Equipment failure
		Total Minutes	27320		Percentage of outage duration	
Corrective action plan for Reid Village Substation - Circuit 2 - Downtown Reid Village/Prewitt Pike - Practice good preventive maintenance and patrol lines as needed.				55.34%	430 Tree failure from overhang or dead tree without ice/snow	
				7.91%	500 Lightning	
				0.88%	600 Small Animal/Bird	
				35.87%	710 Motor Vehicle	

Sideview Substation - Circuit 3 Donaldson Road

PSC Reliability Report for 2013						
Substation name - Sideview Substation						
Substation Number - N2						
Circuit Name - Circuit 3 Donaldson Road						
Circuit Location - Town - Winchester/Mt. Sterling, Ky.						
Road - Donaldson Road/Grassy Lick Road/Howell Drennon Road						
County - North Eastern Clark County, North Western Montgomery County, Ky						
General location - East Central Kentucky						
Total Circuit Length 39.30 miles						
Customer count for this circuit - 424						
Date of last Circuit Trim - 2013						
Date	CAIDI	SAIDI	SAIFI			
2008	122	71	0.58			
2009	50	31	0.62			
2010	150	30	0.2			
2011	89	73	0.82			
2012	70	60	0.86			
2013	122	156	1.28			
5 yr average	96	53	0.62			
				411		
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
2/6/13	2	3	180	54	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
4/19/13	1	0	0	82	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
1/21/13	1	1	44	44	340 Overload	999 No Equipment failure
1/18/13	1	559	33540	39	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
4/25/13	268	0	0	125	400 Decay/Age of Material/Equipment	330 Jumper
6/16/13	2	411	24660	36	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/19/13	2	0	0	79	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/18/13	191	0	0	172	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/30/13	3	0	0	60	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
11/27/13	1	1	35	34	470 Borrower crew cuts tree	999 No Equipment failure
4/17/13	1	2	111	112	500 Lightning	999 No Equipment failure
4/8/13	3	24	1440	47	601 Squirrel	999 No Equipment failure
5/6/13	15	0	0	82	601 Squirrel	999 No Equipment failure
12/20/13	1	0	0	56	601 Squirrel	999 No Equipment failure
8/15/13	2	1	50	26	740 Public Cuts Tree	999 No Equipment failure
4/25/13	1	8	480	36	999 Cause Unknown	999 No Equipment failure
5/26/13	1	0	0	65	999 Cause Unknown	999 No Equipment failure
6/19/13	2	0	0	192	999 Cause Unknown	999 No Equipment failure
		Total Minutes	60540	Percentage of outage duration		
				0.30%	300 Material or Equipment Fault/Failure	

Sideview Substation - Circuit 3 Donaldson Road

Corrective action plan for Sideview Substation - Circuit 3 - Donaldson Road Clark Energy is doing a systematic change outs of porcelain cutouts on the Sideview substation after outage information showed this station to have had the most outages due to faulty cutouts. Eventually we will change out all old cutouts over a period of years. The ROW was cleared in 2013/14		0.07%	340 Overload	
		55.40%	400 Decay/Age of Material/Equipment	
		40.73%	430 Tree failure from overhang or dead tree without ice/snow	
		0.06%	470 Borrower crew cuts tree	
		0.18%	500 Lightning	
		2.38%	601 Squirrel	
		0.08%	740 Public Cuts Tree	
		0.79%	999 Cause Unknown	

Sideview Substation - Circuit 1- Pretty Run Road

Substation name - Sideview Substation						
Substation Number - N2						
Circuit Name - Circuit 1 Pretty Run Road						
Circuit Location - Town - Winchester, Ky.						
Road - Donaldson Road/Big Stoner Road/Pretty Run Road/Gay Evens Road						
County - North Eastern Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 93.27 miles						
Customer count for this circuit - 579						
Date of last Circuit Trim - 2013						
Date	CAIDI	SAIDI	SAIFI			
2008	102	195	1.92			
2009	125	110	0.88			
2010	109	164	1.5			
2011	55	78	1.42			
2012	116	540	4.64			
2013	334	522	1.57			
5 yr average	101	217	2.07			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
7/30/13	6	9	522	87	300 Material or Equipment Fault/Failure	360 Fuse cutout (damaged, malfunction, maintenance)
3/11/13	7	16	960	81	320 Conductor Sag or Inadequate Clearance	999 No Equipment failure
3/11/13	7	0	0	57	320 Conductor Sag or Inadequate Clearance	999 No Equipment failure
3/21/13	1	1	48	48	340 Overload	500 Transformer bad
1/26/13	32	79	4740	89	400 Decay/Age of Material/Equipment	330 Jumper
1/30/13	3	0	0	119	400 Decay/Age of Material/Equipment	330 Jumper
2/11/13	1	0	0	130	400 Decay/Age of Material/Equipment	300 Line conductor
9/11/13	5	0	0	54	400 Decay/Age of Material/Equipment	310 Connector or clamp
9/14/13	6	0	0	183	400 Decay/Age of Material/Equipment	300 Line conductor
4/6/13	3	28	1680	68	420 Tree Growth	999 No Equipment failure
4/30/13	1	0	0	49	420 Tree Growth	999 No Equipment failure
5/12/13	3	0	0	94	420 Tree Growth	999 No Equipment failure
6/26/13	1	0	0	216	420 Tree Growth	999 No Equipment failure
7/21/13	6	0	0	71	420 Tree Growth	999 No Equipment failure
7/30/13	6	0	0	80	420 Tree Growth	999 No Equipment failure
3/16/13	7	3437	206220	165	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/17/13	1	0	0	227	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/26/13	3	0	0	73	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/27/13	1	0	0	629	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/10/13	13	0	0	118	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/10/13	3	0	0	25	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/13/13	13	0	0	261	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
10/6/13	2	0	0	141	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/22/13	480	0	0	415	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/23/13	15	59	3540	179	490 Maintenance, Other	300 Line conductor

Sideview Substation - Circuit 1- Pretty Run Road

8/13/13	2	0	0	165	490 Maintenance, Other	999 No Equipment failure
8/13/13	4	0	0	126	490 Maintenance, Other	999 No Equipment failure
4/17/13	1	63	3780	98	500 Lightning	999 No Equipment failure
4/17/13	7	0	0	55	500 Lightning	999 No Equipment failure
5/21/13	1	0	0	193	500 Lightning	999 No Equipment failure
5/22/13	3	0	0	108	500 Lightning	999 No Equipment failure
6/24/13	5	0	0	53	500 Lightning	999 No Equipment failure
6/26/13	3	0	0	184	500 Lightning	999 No Equipment failure
6/26/13	7	0	0	121	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	152	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	52	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	54	500 Lightning	999 No Equipment failure
6/27/13	1	0	0	61	500 Lightning	999 No Equipment failure
6/29/13	2	0	0	164	500 Lightning	999 No Equipment failure
7/21/13	12	0	0	41	500 Lightning	999 No Equipment failure
2/19/13	3	5	282	95	590 Weather, Other	999 No Equipment failure
8/4/13	49	473	28380	571	600 Small Animal/Bird	999 No Equipment failure
9/27/13	1	0	0	57	600 Small Animal/Bird	999 No Equipment failure
12/31/13	6	0	0	62	600 Small Animal/Bird	999 No Equipment failure
7/18/13	1	1	45	45	601 Squirrel	999 No Equipment failure
9/8/13	3	3	201	67	612 Animal/Large Bird	999 No Equipment failure
4/2/13	2	15	900	75	999 Cause Unknown	999 No Equipment failure
4/20/13	3	0	0	56	999 Cause Unknown	999 No Equipment failure
6/21/13	1	0	0	61	999 Cause Unknown	999 No Equipment failure
8/23/13	5	0	0	58	999 Cause Unknown	999 No Equipment failure
8/29/13	1	0	0	69	999 Cause Unknown	999 No Equipment failure
10/29/13	1	0	0	101	999 Cause Unknown	999 No Equipment failure
					Percentage of outage duration	
		Total Minutes	251298			
				0.21%	300 Material or Equipment Fault/Failure	
				0.38%	320 Conductor Sag or Inadequate Clearance	
				0.02%	340 Overload	
				1.89%	400 Decay/Age of Material/Equipment	
				0.67%	420 Tree Growth	
				82.06%	430 Tree failure from overhang or dead tree without ice/snow	
				1.41%	490 Maintenance, Other	
				1.50%	500 Lightning	
				0.11%	590 Weather, Other	
				11.29%	600 Small Animal/Bird	
				0.02%	601 Squirrel	
				0.08%	612 Animal/Large Bird	
				0.36%	999 Cause Unknown	

Corrective action plan for Sideview Substation - Circuit 1 - Pretty Run Road Clark Energy is doing a systematic change outs of porcelain cutouts on the Sideview substation after outage information showed this station to have had the most outages due to faulty cutouts. Eventually we will change out all old cutouts over a period of years. ROW was cleared in calendar year 2013

Stanton Substation - Circuit 1 - Downtown Circuit

PSC Reliability Report for 2013						
Substation name - Stanton						
Substation Number - E1						
Circuit Name - Circuit 1 Downtown Stanton						
Circuit Location - Town - Stanton, Ky.						
Road - Hwy 15/Railroad Street/Hwy 15						
County - Powell County, Ky						
General location - East Central Kentucky						
Total Circuit Length 7.20 miles						
Customer count for this circuit - 600						
Date of last Circuit Trim - 2012						
Date	CAIDI	SAIDI	SAIFI			
2008	49	24	0.49			
2009	41	45	1.1			
2010	166	33	0.2			
2011	67	22	0.32			
2012	68	31	0.46			
2013	67	43	0.64	602		
5 yr average	78	31	0.51			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
9/30/13	3	3	165	56	100 Construction	999 No Equipment failure
3/1/13	5	4	240	18	110 Maintenance	999 No Equipment failure
11/4/13	3	0	0	53	110 Maintenance	999 No Equipment failure
6/24/13	47	64	3854	82	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
2/11/13	18	602	36120	96	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	495	0	0	65	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	18	0	0	112	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/11/13	4	0	0	56	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/21/13	2	9	540	46	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
8/19/13	7	0	0	50	490 Maintenance, Other	310 Connector or clamp
12/12/13	1	0	0	88	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
5/8/13	49	62	3724	76	500 Lightning	999 No Equipment failure
9/18/13	18	22	1320	55	600 Small Animal/Bird	999 No Equipment failure
9/18/13	1	0	0	19	600 Small Animal/Bird	999 No Equipment failure
10/4/13	5	0	0	46	600 Small Animal/Bird	999 No Equipment failure
8/9/13	1	6	360	71	601 Squirrel	999 No Equipment failure
12/22/13	10	0	0	31	601 Squirrel	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			46323			
Corrective action plan for Stanton Substation - Circuit 1 - Downtown Stanton - Practice good preventive maintenance and patrol lines as needed. Continue to add animal guards when around equipment poles and after outages.				0.36%	100 Construction	
				0.52%	110 Maintenance	
				8.32%	400 Decay/Age of Material/Equipment	
				77.97%	430 Tree failure from overhang or dead tree without ice/snow	
				1.17%	490 Maintenance, Other	
				8.04%	500 Lightning	
				2.85%	600 Small Animal/Bird	
	0.78%	601 Squirrel				

Stanton Substation - Circuit 1 - Downtown Circuit

PSC Reliability Report for 2013						
Substation name - Stanton						
Substation Number - E1						
Circuit Name - Circuit 1 Downtown Stanton						
Circuit Location - Town - Stanton, Ky.						
Road - Hwy 15/Railroad Street/Hwy 15						
County - Powell County, Ky						
General location - East Central Kentucky						
Total Circuit Length 7.20 miles						
Customer count for this circuit - 600						
Date of last Circuit Trim - 2012						
Date	CAIDI	SAIDI	SAIFI			
2008	49	24	0.49			
2009	41	45	1.1			
2010	166	33	0.2			
2011	67	22	0.32			
2012	68	31	0.46			
2013	67	43	0.64	602		
5 yr average	78	31	0.51			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration in Minutes	Cause	Equipment/Material Failure
9/30/13	3	3	165	56	100 Construction	999 No Equipment failure
3/1/13	5	4	240	18	110 Maintenance	999 No Equipment failure
11/4/13	3	0	0	53	110 Maintenance	999 No Equipment failure
6/24/13	47	64	3854	82	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
2/11/13	18	602	36120	96	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	495	0	0	65	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	18	0	0	112	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/11/13	4	0	0	56	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/21/13	2	9	540	46	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
8/19/13	7	0	0	50	490 Maintenance, Other	310 Connector or clamp
12/12/13	1	0	0	88	490 Maintenance, Other	360 Fuse cutout (damaged, malfunction, maintenance)
5/8/13	49	62	3724	76	500 Lightning	999 No Equipment failure
9/18/13	18	22	1320	55	600 Small Animal/Bird	999 No Equipment failure
9/18/13	1	0	0	19	600 Small Animal/Bird	999 No Equipment failure
10/4/13	5	0	0	46	600 Small Animal/Bird	999 No Equipment failure
8/9/13	1	6	360	71	601 Squirrel	999 No Equipment failure
12/22/13	10	0	0	31	601 Squirrel	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			46323			
Corrective action plan for Stanton Substation - Circuit 1 - Downtown Stanton - Practice good preventive maintenance and patrol lines as needed. Continue to add animal guards when around equipment poles and after outages.				0.36%	100 Construction	
				0.52%	110 Maintenance	
				8.32%	400 Decay/Age of Material/Equipment	
				77.97%	430 Tree failure from overhang or dead tree without ice/snow	
				1.17%	490 Maintenance, Other	
				8.04%	500 Lightning	
				2.85%	600 Small Animal/Bird	
	0.78%	601 Squirrel				

Stanton Substation - Circuit 5 Hwy 213

PSC Reliability Report for 2013						
Substation name - Stanton						
Substation Number - E1						
Circuit Name - Circuit 5 - Hwy 213 - Spacer Cable						
Circuit Location - Town - Stanton, Ky.						
Road - Hwy 213/Hatchers Creek/Paint Creek						
County - Powell County, Ky						
General location - East Central Kentucky						
Total Circuit Length 41.60 miles						
Customer count for this circuit - 801						
Date of last Circuit Trim - 2012						
Date	CAIDI	SAIDI	SAIFI			
2008	61	9	0.15			
2009	51	16	0.31			
2010	82	25	0.31			
2011	98	21	0.21			
2012	68	33	0.48			
2013	76	97	1.27			
5 yr average	72	21	0.29			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
11/19/13	9	10	600	0	100 Construction	999 No Equipment failure
10/21/13	3	0	0	29	100 Construction	999 No Equipment failure
12/4/13	1	5	300	56	110 Maintenance	999 No Equipment failure
5/23/13	7	0	0	9	110 Maintenance	999 No Equipment failure
5/13/13	4	0	0	33	110 Maintenance	999 No Equipment failure
2/4/13	3	0	0	14	110 Maintenance	310 Connector or clamp
11/28/13	7	3	168	24	340 Overload	999 No Equipment failure
12/25/13	2	11	660	111	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
11/24/13	2	0	0	90	400 Decay/Age of Material/Equipment	320 Splice or dead end
11/11/13	1	0	0	178	400 Decay/Age of Material/Equipment	390 Overhead line conductors and devices, distribution, other
10/14/13	1	0	0	51	400 Decay/Age of Material/Equipment	360 Fuse cutout (damaged, malfunction, maintenance)
8/9/13	7	253	15180	45	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/8/13	7	0	0	46	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
7/27/13	6	0	0	104	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/10/13	1	0	0	54	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
5/21/13	64	0	0	218	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
12/8/13	5	14	820	163	440 Trees With Ice/Snow	999 No Equipment failure
1/23/13	7	3	182	26	470 Borrower crew cuts tree	999 No Equipment failure
10/23/13	1	8	480	99	490 Maintenance, Other	350 Lightning arrester line
6/20/13	2	0	0	142	490 Maintenance, Other	999 No Equipment failure
3/18/13	1	0	0	59	490 Maintenance, Other	350 Lightning arrester line
6/17/13	5	114	6840	45	500 Lightning	999 No Equipment failure
5/21/13	35	0	0	180	500 Lightning	999 No Equipment failure
3/18/13	3	0	0	68	500 Lightning	999 No Equipment failure
3/18/13	4	0	0	32	500 Lightning	999 No Equipment failure
9/9/13	1	7.47	448	28	600 Small Animal/Bird	999 No Equipment failure
6/18/13	9	0	0	49	600 Small Animal/Bird	999 No Equipment failure
11/19/13	1	1	88	28	601 Squirrel	999 No Equipment failure
6/4/13	1	0	0	58	601 Squirrel	999 No Equipment failure

Stanton Substation - Circuit 5 Hwy 213

11/4/13	709	725	43500	61	790 Public, Other	999 No Equipment failure
8/29/13	2	0	0	76	790 Public, Other	999 No Equipment failure
5/31/13	1	0	0	39	790 Public, Other	999 No Equipment failure
			Total Minutes			
			69266	0.87%	100 Construction	
				0.43%	110 Maintenance	
				0.24%	340 Overload	
				0.95%	400 Decay/Age of Material/Equipment	
				21.92%	430 Tree failure from overhang or dead tree without ice/snow	
				1.18%	440 Trees With Ice/Snow	
				0.26%	470 Borrower crew cuts tree	
				0.69%	490 Maintenance, Other	
				9.88%	500 Lightning	
				0.65%	600 Small Animal/Bird	
				0.13%	601 Squirrel	
				62.80%	790 Public, Other	

Corrective action plan for Stanton Substation - Circuit 5 - Old Clay City Road/Maple Street - Practice good preventive maintenance and patrol lines as needed.

Three Forks Substation - Circuit 3 - Three Forks Road

PSC Reliability Report for 2013				3		
Substation name - Three Forks						
Substation Number - S61						
Circuit Name - Circuit 3 Three Forks						
Circuit Location - Town - Richmond, Ky.						
Road - Three Forks Road/Brumfield Subdivision						
County - Madison County, Ky						
General location - East Central Kentucky						
Total Circuit Length 7.13 miles						
Customer count for this circuit - 53						
Date of last Circuit Trim - 2011						
Date	CAIDI	SAIDI	SAIFI			
2008		60	66	1.11		
2009		264	87	0.33		
2010		89	56	0.63		
2011		59	71	1.2		
2012		116	35	0.3		
2013		51	111	2.1		
5 yr average		118	63	0.71		
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
6/9/13	141	235	14100	101	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/15/13	1	11	660	130	500 Lightning	520 Transformer arrester
7/21/13	10	0	0	54	500 Lightning	999 No Equipment failure
10/26/13	1	1	61	61	600 Small Animal/Bird	999 No Equipment failure
11/8/13	4	13	780	77	601 Squirrel	999 No Equipment failure
4/8/13	9	0	0	52	601 Squirrel	999 No Equipment failure
9/16/13	1	1	88	88	710 Motor Vehicle	999 No Equipment failure
6/18/13	141	4	240	55	999 Cause Unknown	999 No Equipment failure
9/30/13	1	0	0	79	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			15929			
Corrective action plan for Three Forks Substation - Three Forks Road/Brumfield Subdivision- Practice good preventive maintenance and patrol lines as needed. One large outage pushed this circuit over the five year average. We cover all equipment with animal guards.				88.52%	430 Tree failure from overhang or dead tree without ice/snow	
				4.14%	500 Lightning	
				0.38%	600 Small Animal/Bird	
				4.90%	601 Squirrel	
				0.55%	710 Motor Vehicle	
				1.51%	999 Cause Unknown	

Trapp Substation - Circuit 1 - Trapp Goff Corner Road

PSC Reliability Report for 2013						
Substation name - Trapp						
Substation Number - E90						
Circuit Name - Circuit 1 Trapp Goff Corner Road						
Circuit Location - Town - Winchester, Ky.						
Road - Trapp Goff Corner Road/Will Rupard/Right Angle Road						
County - Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 25.87 miles						
Customer count for this circuit - 221						
Date of last Circuit Trim - 2011						
Date	CAIDI	SAIDI	SAIFI			
2008	77	59	0.77			
2009	87	166	1.91			
2010	204	61	0.3			
2011	88	26	0.3			
2012	91	50	0.55			
2013	142	305	2.16			
5 yr average	109	72	0.77			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
2/14/13	1	23	1380	42	100 Construction	999 No Equipment failure
2/25/13	2	0	0	165	100 Construction	999 No Equipment failure
6/12/13	4	0	0	61	100 Construction	999 No Equipment failure
9/17/13	6	0	0	93	100 Construction	999 No Equipment failure
10/17/13	2	0	0	84	100 Construction	999 No Equipment failure
2/14/13	3	17	1020	215	110 Maintenance	999 No Equipment failure
9/26/13	6	0	0	65	110 Maintenance	999 No Equipment failure
11/24/13	199	382	22940	210	400 Decay/Age of Material/Equipment	300 Line conductor
1/30/13	9	505	30300	55	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/12/13	4	0	0	108	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/16/13	40	0	0	150	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/12/13	66	0	0	354	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/27/13	6	6	372	62	600 Small Animal/Bird	999 No Equipment failure
6/5/13	13	21	1260	85	601 Squirrel	999 No Equipment failure
6/18/13	1	0	0	59	601 Squirrel	999 No Equipment failure
6/18/13	1	0	0	53	601 Squirrel	999 No Equipment failure
7/20/13	66	58	3498	52	999 Cause Unknown	999 No Equipment failure
			Total Minutes	Percentage of outage duration		
			60770			
Corrective action plan for Trapp Substation - Circuit 1 - Trapp Goff Corner Road - Practice good preventive maintenance and patrol lines as needed. Add animal guards when at equipment sites and after outages.				2.27%	100 Construction	
				1.68%	110 Maintenance	
				37.75%	400 Decay/Age of Material/Equipment	
				49.86%	430 Tree failure from overhang or dead tree without ice/snow	
				0.61%	600 Small Animal/Bird	
				2.07%	601 Squirrel	
				5.76%	999 Cause Unknown	

Trapp Substation - Circuit 1 - Trapp Goff Corner Road

PSC Reliability Report for 2013						
Substation name - Trapp						
Substation Number - E90						
Circuit Name - Circuit 1 Trapp Goff Corner Road						
Circuit Location - Town - Winchester, Ky.						
Road - Trapp Goff Corner Road/Will Rupard/Right Angle Road						
County - Clark County, Ky						
General location - East Central Kentucky						
Total Circuit Length 25.87 miles						
Customer count for this circuit - 221						
Date of last Circuit Trim - 2011						
Date	CAIDI	SAIDI	SAIFI			
2008	77	59	0.77			
2009	87	166	1.91			
2010	204	61	0.3			
2011	88	26	0.3			
2012	91	50	0.55			
2013	142	305	2.16			
5 yr average	109	72	0.77			
Outage date	CustomersAffected	CustomerHours	In Minutes	Duration In Minutes	Cause	Equipment/Material Failure
2/14/13	1	23	1380	42	100 Construction	999 No Equipment failure
2/25/13	2	0	0	165	100 Construction	999 No Equipment failure
6/12/13	4	0	0	61	100 Construction	999 No Equipment failure
9/17/13	6	0	0	93	100 Construction	999 No Equipment failure
10/17/13	2	0	0	84	100 Construction	999 No Equipment failure
2/14/13	3	17	1020	215	110 Maintenance	999 No Equipment failure
9/26/13	6	0	0	65	110 Maintenance	999 No Equipment failure
11/24/13	199	382	22940	210	400 Decay/Age of Material/Equipment	300 Line conductor
1/30/13	9	505	30300	55	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
4/12/13	4	0	0	108	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
6/16/13	40	0	0	150	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/12/13	66	0	0	354	430 Tree failure from overhang or dead tree without ice/snow	999 No Equipment failure
8/27/13	6	6	372	62	600 Small Animal/Bird	999 No Equipment failure
6/5/13	13	21	1260	85	601 Squirrel	999 No Equipment failure
6/18/13	1	0	0	59	601 Squirrel	999 No Equipment failure
6/18/13	1	0	0	53	601 Squirrel	999 No Equipment failure
7/20/13	66	58	3498	52	999 Cause Unknown	999 No Equipment failure
			Total Minutes		Percentage of outage duration	
			60770			
Corrective action plan for Trapp Substation - Circuit 1 - Trapp Goff Corner Road - Practice good preventive maintenance and patrol lines as needed. Add animal guards when at equipment sites and after outages.				2.27%	100 Construction	
				1.68%	110 Maintenance	
				37.75%	400 Decay/Age of Material/Equipment	
				49.86%	430 Tree failure from overhang or dead tree without ice/snow	
				0.61%	600 Small Animal/Bird	
				2.07%	601 Squirrel	
			5.76%	999 Cause Unknown		