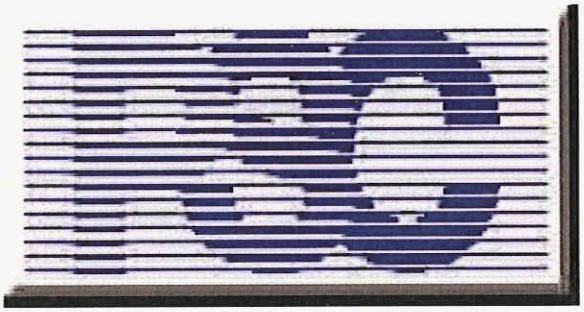

Commonwealth of Kentucky
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-0615
Telephone: (502) 564-3940
psc.ky.gov

ELECTRIC BRANCH
FIELD INSPECTION REPORT

February 22, 2010

UTILITY: AEP/Kentucky Power

DATE OF INSPECTION: January 4th, 2010 and January 5th, 2010, and January 28th, 2010

PURPOSE FOR INSPECTION: Inspect the damages and outages from the December 18th, 2009 snow storm in eastern Kentucky.

AREA INSPECTED: AEP/ Kentucky Power's Hazard service territory: Right-of-Way (ROW) clearing.

CIRCUITS INSPECTED: Hazard District: 7 out of the 10 worst performing circuits in the Hazard area are listed as 1 - 7. The circuits in 8 - 14 were inspected because of damage experienced during the snow storm.

1. Haddix Substation: Quicksand circuit, 34.5 KV, Circuit # (3310501)
2. Bulan Substation: Ajax / Dwarf circuit, 12 KV, Circuit # (3307302)
3. Beckham Substation: Hindman circuit, 34.5 KV, Circuit # (3308401)
4. Collier Substation: Smoot Creek Circuit, 34.5 KV, Circuit # (3308603)
5. Slemp Substation: Defeated Creek Circuit, 34.5 KV, Circuit # (3309901)
6. Jeff Substation: Viper Circuit, 12 KV, Circuit # (3309001)

8. Stinnet Substation: Windover Circuit, 34.5 KV, Circuit # (3311103)
9. Stinnet Substation: Redbird Circuit, 34.5 KV, Circuit # (3311101)
10. Leslie Substation: Wooton Circuit, 34.5 KV, Circuit # (3303902)
11. Leslie Substation: Hyden Circuit, 34.5 KV, Circuit # (3303901)
12. Bonnyman Substation: Big Creek Circuit, 34.5 KV, Circuit # (3308503)
13. Bonnyman Substation: Hazard Circuit, 34.5 KV, Circuit # (3308502)
14. Haddix Substation: Canoe Circuit, 34.5 KV, Circuit # (3310502)
15. Chavies Substation: Chavies Circuit, 12 KV, Circuit # (3301101)
16. Engle Substation: Grapevine Circuit, 34.5, Circuit # (3312202)

DESCRIPTION:

On Monday, January 4th, 2010, the Public Service Commission (PSC) electric branch investigators were directed to inspect AEP/Kentucky Power's (company) service territory after the outages the company experienced during the snow storm which began on Friday, December 18th, 2009. This report contains information on the Hazard District. Inspection of the Hazard service territory was on Monday, January 11th, and Tuesday, January 12th, and January 28th, 2010. These first two days were spent with company personnel inspecting the circuits highlighted. The last day was spent on my own.

On January 11th, 2010, the first day of the inspection, I met with the manager of the Hazard District to discuss what areas I would like to inspect. I requested that we start with the ten worst performing circuits in AEP/Kentucky Power's service territory. Seven out the ten worst performing circuits (listed above) were in the Hazard District. The circuits highlighted are what I was shown during my inspection. The manager suggested that we inspect circuit 3310501 (Quicksand), one of the ten worst performing along with some of the circuits (8 – 14) that were damaged during the recent snow storm. During the inspection the manager for the Hazard District discussed how the company crews and crews providing mutual assistance found extremely difficult and treacherous conditions created by the heavy snow fall. The manager for the Hazard District said on Friday evening that the conditions had become too hazardous for the crews, and the company suspended restoration efforts until the following morning. This also was a factor on the duration of outages for some of the customers.

The first day of the inspection (1/11/2010) was spent with the manager of the Hazard District looking at sections of the circuits listed above, 8, 9, 10, 11, and 12. The second day, (1/12/2010), of the inspection was spent with a supervisor. We looked at sections of the circuits listed above, 1, 14, 15, and 16. The inspection of each circuit would begin at the first station zone (breaker zone) near the substation and travel the circuit toward the end of that circuit. During the inspection it was noted that the station zones of a main/feeder circuit received the most attention in the Vegetation Management Program (VMP) that is followed by the company. Photos in Attachment A show samples of the

examples of ROW clearing within the station zone and outside the station zone on the circuits highlighted. According to the company specifications, the company will attempt to clear/trim forty feet of ROW on single-phase circuits, and fifty feet of ROW on three-phase circuits if possible. Included in Attachment B is an example of the company's ROW clearing specifications provided during the 2007 field inspection. Another clearing method used by the company on a station zone (three-phase/main feeder) circuit that travels across steep terrain is to clear at least fifty feet of ROW on that section of the circuit. With permission from the property owners, the company would clear cut forty feet on the upper side of the circuit, and ten feet below the circuit. This clearing practice is an effort to reduce the out-of-ROW trees that make contact with the company's conductors and structures.

The company was given a set of questions on January 8th, 2010 from the Commission staff before the inspection on January 11th and 12th, 2010. The responses to those questions are in Attachment C of this report. In question three the company was asked to provide the number of poles broken inside the station zone (a. six), and the number of broken poles outside the station zone (b. one hundred ninety-eight) during the recent snow storm. In question five the company was asked to provide the indices/circuit performance (outage numbers) for 2009, and to separate those outage numbers reflecting customer outages inside the station zone, and the customer outages outside the station zone.

Response to question five:

Kentucky Power Company
2009 Worst Performing Circuits
(Excluding IEEE-defined Major Events)

	Year	Outages	Customers	Cust Min Interr	SAIFI	CAIDI	SAIDI
Outside Breaker Zone	2009	726	39,411	12,688,734	5.225	322.0	1682.2
Inside Breaker Zone	2009	23	9,604	1,907,243	1.273	198.6	252.8
Total	2009	749	49,015	14,595,977	6.498	297.8	1935.0

In question six the company was asked to provide cumulative numbers on all of the circuits in its Kentucky territory, and to separate the outage numbers the same as in question five. The outage numbers in response to question five and question six show most of the outages were experienced outside the station zone for the ten worst performing circuits, and the company's system performance in 2009.

Response to question six:

Kentucky Power Company
2009 System Performance
(Excluding IEEE-defined Major Events)

	Year	Outages	Customers	Cust Min Interr	SAIFI	CAIDI	SAIDI
Outside Breaker Zone	2009	9,450	296,964	68,092,483	1.709	229.3	391.9
Inside Breaker Zone	2009	156	110,092	14,230,709	0.634	129.3	81.9
Total	2009	9,606	407,056	82,323,192	2.343	202.2	473.9

The responses to questions three, five, and six indicate a difference in ROW clearing practices for customers outside the station zone. According to the company's response to question eleven, the company's goal is to maintain a three-year cycle on the first station zone on each circuit. The company's approach to ROW clearing for customers outside the station zone is not a cycle-based approach. This is consistent with the findings reported in the 2005 inspection report of the Hazard/Whitesburg territory (Attachment D). The outage numbers provided by the company in response to question five show a large difference in outages for customers inside the station zone verses those customers outside the station zone.

Following is a time line on the company's work force numbers and outage numbers experienced during the snow storm. The snow storm that occurred on December 18th, 2009 did create several outages due to contact by trees both in and out of the ROW. The amount of snow experienced in Eastern Kentucky (18-24 inches) caused trees to fall across the conductors/structures, and several of the roads creating delays in the restoration efforts. Even though the company experienced outages of almost fifty percent (See Attachment C, Pages 1&2) over its system during peak reporting periods, the outage duration for some of these customers was attributed to the heavy snow, location of structures, difficult terrain, and hazardous road conditions. During the inspection, company personnel stated that it had been several years since the company had to deal with a storm of this magnitude. The company stated, in its response to question nine, that most of the outside help requested had arrived on the 19th, 20th, and 21st, and that no other crews were available at that time, unless they wanted crews who had to travel at least two days. The numbers for both the work force and outages per county were taken from the PSC outage reporting system.

AEP/KENTUCKY POWER												
WORK FORCE NUMBERS												
Date Rpt.	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	
Time Rpt.	9:54 AM	11:35 AM	9:40 AM	4:26 PM	11:07 AM	6:52 AM	7:52 AM	7:25 AM	7:53 AM	2:32 PM	10:18 AM	Peak #
	0	353	1136	1343	1363	1363	1363	1363	1363	1000	461	1363

AEP SNOW STORM 12/18/2009
OUTAGE NUMBERS PER COUNTY

Date	12/18/2009	12/19/2009	12/20/2009	12/21/2009	12/22/2009	12/23/2009	12/24/2009	12/25/2009	12/26/2009	12/27/2009	12/28/2009	12/29/2009	
Time Rpt.	9:54 PM	11:35 AM	9:40 AM	4:26 PM	11:07 AM	6:52 AM	7:52 AM	7:25 AM	7:53 AM	2:32 PM	10:18 AM	8:00 PM	Peak Numbers
Boyd		314	1487	226	131	101	0	477	0	0	0	0	1487
Breathitt	1300	3429	3056	2820	2169	1806	1231	906	406	172	170	0	3429
Carter			2133	412	367	195	0	0	0	194	0	0	2133
Floyd		5600	6971	5844	5581	4443	2382	1226	556	204	153	0	6971
Greenup		116	215	372	0	0	0	0	0	0	0	0	372
Johnson		2425	1478	372	181	181	0	0	0	0	0	0	2425
Knott	300	6699	5663	4160	3639	3337	2164	859	293	293	0	0	6699
Leslie	2000	4873	3138	2388	2785	2128	1104	761	278	0	0	0	4873
Letcher	1000	8699	7054	6000	4839	3257	1958	749	15	0	0	0	8699
Magoffin		655	852	150	0	0	0	0	0	0	0	0	852
Martin		1752	2133	442	443	363	120	0	0	0	0	0	2133
Perry	1400	7012	7393	5382	5604	3232	1915	1714	1228	0	0	0	7393
Pike	7000	26630	24124	19038	15703	13669	10320	7516	4000	1950	712	0	26630
Total Per Day	13000	70428	69624	49506	42918	33375	21194	14208	6776	2813	1035	0	78023

The information provided for each district in response to question four is shown below. The budget figures below on ROW show a reduction in money allocated for ROW in the Hazard District from 2006 - 2010.

First response to question four:

The following table shows the total Capital and O&M budgets and actual expenditures for ROW maintenance in Kentucky.

YEAR	ASHLAND BUDGET	ASHLAND Actual	HAZARD BUDGET	HAZARD Actual	PIKEVILLE BUDGET	PIKEVILLE Actual	TOTAL BUDGET	TOTAL Actual
2005	$2,298,361	$2,074,997	$2,977,202	$2,687,865	$4,422,164	$3,992,399	$9,697,727	$8,755,261
2006	$2,425,519	$2,299,221	$3,507,028	$3,324,414	$4,567,536	$4,329,701	$10,500,083	$9,953,336
2007	$2,135,476	$2,241,450	$3,269,948	$3,432,221	$4,127,951	$4,332,804	$9,533,375	$10,006,475
2008	$2,856,705	$2,794,509	$3,352,358	$2,901,244	$3,858,253	$4,007,404	$10,067,316	$9,703,157
2009	$2,793,084	$2,713,359	$3,223,188	$2,893,617	$3,659,728	$3,860,293	$9,676,000	$9,487,269
2010	$2,046,890	N/A	$2,578,847	N/A	$2,874,264	N/A	$7,500,001	N/A

Commission staff sent a second information request to the company on question four requesting the company to separate the budget and actual expenditures for each category (Capital, O&M, and ROW) listed in the original response, and to give a brief description of what each would include. The company's response to the second information request is shown below.

Second response to question four:

Following is a brief description of categories capital, O&M, and ROW maintenance:

a. Capital accounts for the:
- Widening of ROW
- Tree Removals equal to or greater than 18" diameter
- Tree trimming. Associated with Widening
- Initial Tree Growth Regulator application
- First & Second Herbicide application following initial clearing

b. O&M accounts for work associated with existing rights-of-way except as noted in Capital:
- All trimming, brush spraying, and brush cutting
- All tree removals less than 18 " diameter

c. ROW Maintenance:
- ROW maintenance describes activities associated with maintaining existing ROW. The work is classified to either Capital or O&M per the descriptions shown in (a) and (b) above.

The following charts demonstrate the ROW maintenance by Capital and O&M and by budget and actual amounts for the total company and each area.

KENTUCKY POWER:

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$2,230,477	$2,180,314	$7,467,250	$6,574,947
2006	$1,668,587	$2,056,916	$8,831,496	$7,896,420
2007	$2,993,480	$3,010,248	$6,539,895	$6,996,227
2008	$2,680,316	$2,523,519	$7,387,000	$7,179,638
2009	$2,675,980	$2,912,459	$7,000,000	$6,574,810
2010	$1,000,001	N/A	$6,500,000	N/A

ASHLAND:

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$528,623	$518,749	$1,769,738	$1,556,248
2006	$385,337	$459,844	$2,040,182	$1,839,377
2007	$670,539	$598,467	$1,464,937	$1,642,983
2008	$794,081	$762,901	$2,062,624	$2,031,608
2009	$772,457	$873,702	$2,020,627	$1,839,657
2010	$273,371	N/A	$1,773,519	N/A

PIKEVILLE:

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$ 1,017,098	$ 906,275	$ 3,405,066	$ 3,086,124
2006	$ 725,633	$ 736,049	$ 3,841,903	$ 3,593,652
2007	$ 1,296,177	$ 1,464,488	$ 2,831,774	$ 2,868,316
2008	$ 979,050	$ 1,102,036	$ 2,879,203	$ 2,905,368
2009	$ 1,012,136	$ 1,303,778	$ 2,647,592	$ 2,576,515
2010	$ 378,311	N/A	$ 2,495,953	N/A

HAZARD:

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$ 684,756	$ 755,290	$ 2,292,446	$ 1,932,575
2006	$ 557,617	$ 861,023	$ 2,949,411	$ 2,463,391
2007	$ 1,026,764	$ 947,293	$ 2,243,184	$ 2,484,928
2008	$ 907,185	$ 658,582	$ 2,445,173	$ 2,242,662
2009	$ 891,387	$ 734,979	$ 2,331,781	$ 2,158,638
2010	$ 348,319	N/A	$ 2,230,528	N/A

On July 26th – 28th, 2005 a periodic regulatory inspection of the Hazard/Whitesburg operations centers was conducted. During the inspection of the service territory around the Hazard and Whitesburg area, it was noted that the ROW outside the first station zone had not been receiving the same attention. The first station zone on each circuit leaving the substation would be cleared to the first automatic breaker, and the rest of the circuit was trimmed using a performance-base or hot spotting method at that time. On August 3rd, 2005 the findings of the inspection report were submitted to the Commission with one deficiency and one recommendation (see Attachment D). Also included in Attachment D are indices and budget numbers from inspections in 2005 and 2007.

FINDINGS:

In 2005 AEP/Kentucky Power Hazard territory was cited with a deficiency on the maintenance or continuity of service, 807 KAR 5:041, Section 5, (1). The recommendation in that inspection was that the company performs the same level of ROW clearing for the entire circuit as it had been doing for the station zone. During the inspection on January 11th and 12th, of 2010, the company was performing the same type of vegetation management as noted in the 2005 inspection. It was noted that the company had performed reclearing on some of the circuit's second and third recloser zones beyond the station zones, as stated in the company's response to question eleven in Attachment C. The budget for the Hazard District has been reduced by $928,181 from 2006 – 2010, and the actual expenditures for the Hazard District have been reduced $538,604 from 2007 – 2009. The VMP the company has in place still does not provide the same quality of service for all the customers in the Hazard District. If a cycle based approach to ROW clearing produces adequate results for those customers inside the station zone, then the company should consider using a cycle trim on the entire circuit, and strive to maintain the same quality of service for each customer on that circuit.

The numbers provided in the company's response in Attachment C to question three and five could support that customers outside the station zone have not been receiving the same quality of service as those customers inside the station zone. The difficulty and duration experienced by crews performing the restoration work during the recent snow storm on circuits outside the station zone might have been reduced if those circuits had received the same clearing practices followed within the station zone.

Another factor to consider would be safety. If trees are allowed to grow into the conductor before they are trimmed, then this is creating a hazardous situation for company personnel and possibly the public. In a performance base approach or hot spotting, the tree has probably made contact with the conductor before any clearing would take place.

ATTACHMENT A

PSC PHOTOGRAPHS

During this inspection, it was not possible to inspect every circuit within AEP/Kentucky Power's Hazard District. Therefore, the findings contained in this report are of the circuits mentioned, and were inspected on a sample basis. This inspection focused on ROW and operational issues in the Hazard District before, during, and after the December 18th, 2009 snow storm restoration efforts. The photographs in this report are a sampling of the circuits inspected.

Sign: _____ Date: 2/24/2010

John Shupp
Electric Branch Manager
Engineering Division
Kentucky Public Service Commission

Sign: _____ Date: 2/22/2010

Jeffrey C Moore
Electric Utility Investigator
Engineering Division
Kentucky Public Service Commission

Attachment A: PSC Photographs
Attachment B: ROW Clearing Specifications and 2007 ROW Information
Attachment C: AEP/Kentucky Power Responses
Attachment D: PSC 2005 Inspection Report


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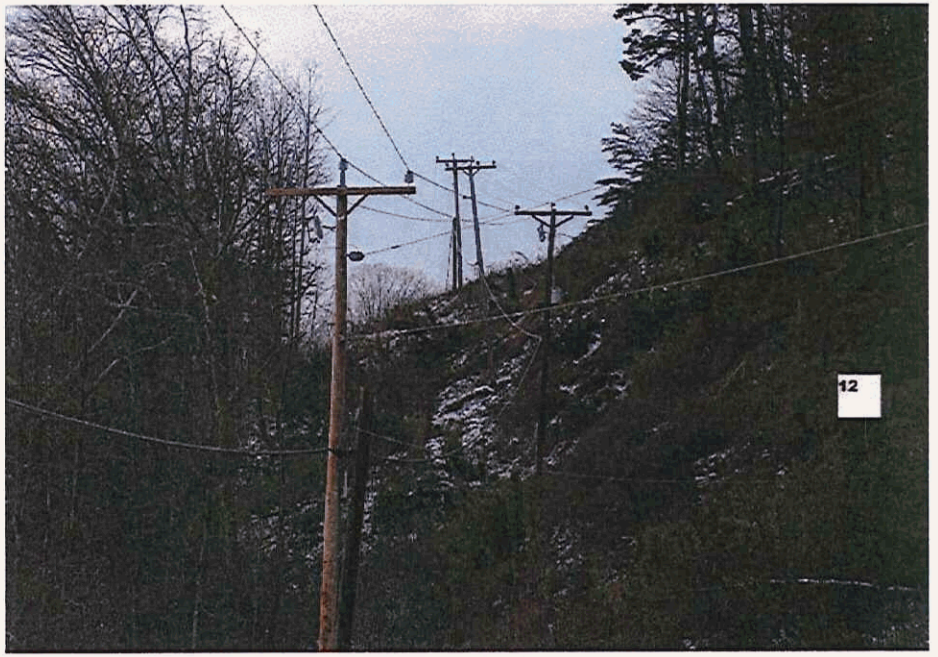
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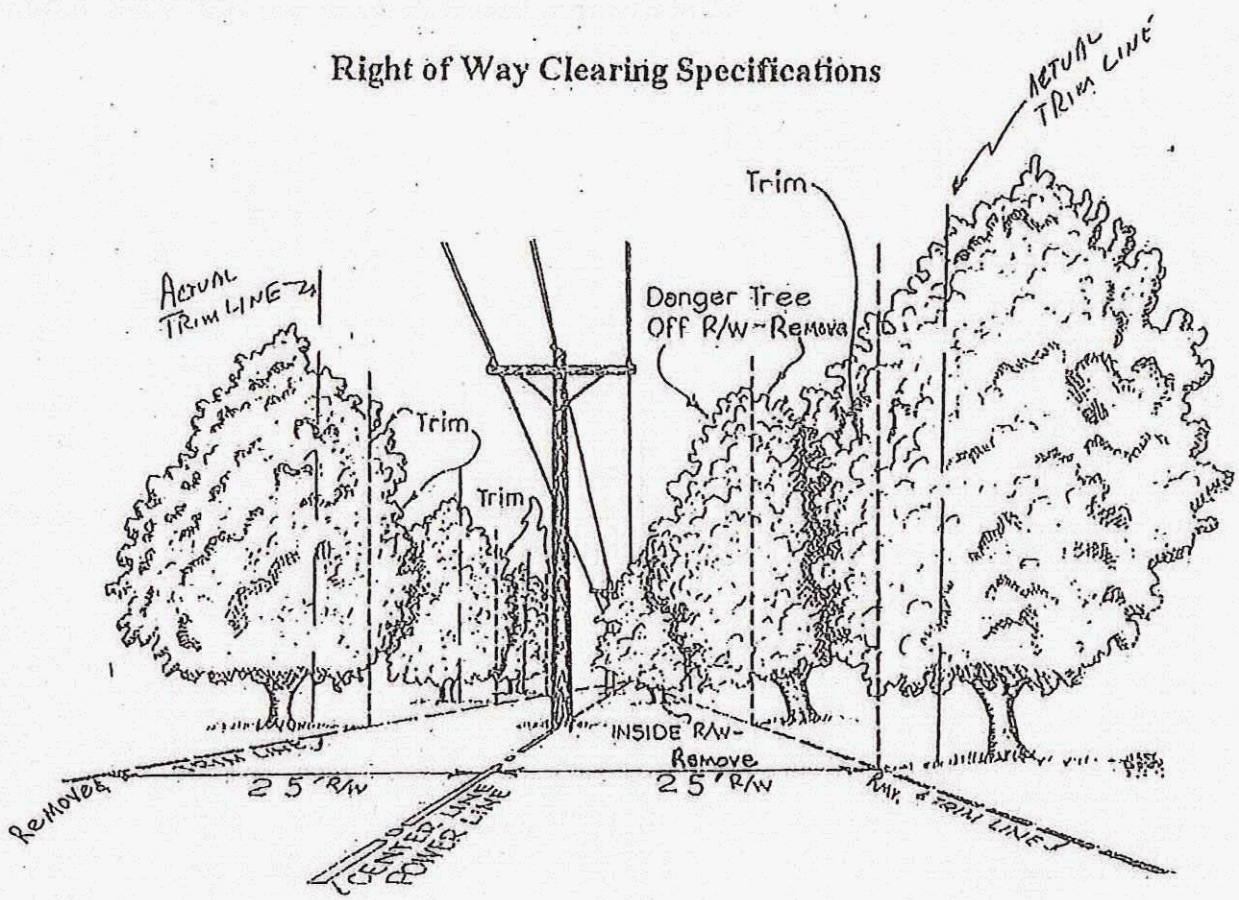
ATTACHMENT B

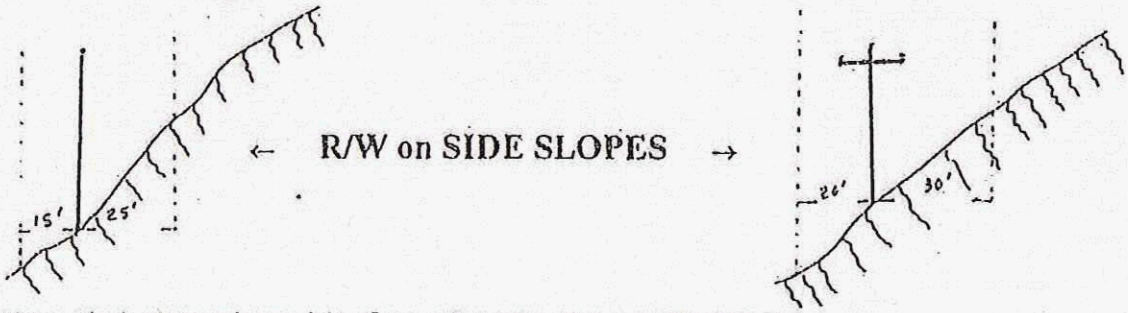
ROW Clearing Specifications and 2007 ROW Information

New Construction

For either voltage 12,470 – 34,500

Right of Way Clearing Specifications





← R/W on SIDE SLOPES →

Note: Single phase primary right of way will be cleared to a width of 40 feet

3 " " - - - - - - - 50 FT.

Kentucky Power - Hazard/Whitesburg					
Vegetation Management Funding					
Year	Hazard Whitesburg	% Change Relative to 1997	AEP/Kentucky (D)	% Change Relative to 1997	Hazard Share of Total KY VM Budget
1997	$1,147,818		$4,099,999		28.00%
1998	$1,286,226	12.06%	$3,962,200	-3.36%	32.46%
1999	$1,367,653	19.15%	$3,088,468	-24.67%	44.28%
2000	$1,199,005	4.46%	$2,985,748	-27.18%	40.16%
2001	$1,109,587	-3.33%	$2,846,632	-30.57%	38.98%
2002	$1,152,638	0.42%	$3,202,100	-21.90%	36.00%
2003	$1,577,161	37.41%	$4,284,397	4.50%	36.81%
2004	$3,165,744	175.81%	$7,076,273	72.59%	44.74%
2005	$2,789,241	143.00%	$9,170,000	123.66%	30.42% *
2006	$3,078,186	168.18%	$9,219,777	124.87%	33.39%

* The reduction for Hazard/Whitesburg in 2005 is due to a shift in the program to concentrate on station zones. Hazard has approximately 25% of Kentucky's station zone miles. We had previously done work on Hazard's in 2004 and thus many of their's was in better condition and required less labor than other locations in Kentucky.

KY Reliability Performance History by Area - Excluding Major Storms

HAZARD DISTRICT (Excluding Major Events)

	Num-Int	Dur-Tot	Dur-Avg	CustOut	MagIndx	Cust-Hrs	SAIFI	CAIDI	Served	ASAI	SAIDI
Year 2006											
HAZARD AREA	1,941	7,476	3.9	129,175	66.6	433,218	3.85	3.35	33,526	99.852	12.922
WHITESBURG AREA	760	2,801	3.7	46,602	61.3	99,873	3.81	2.14	12,223	99.907	8.171
TOTALS - Hazard District	2,701	10,277	3.8	175,777	65.1	533,091	3.84	3.03	45,749	99.867	11.653
Year 2005											
HAZARD AREA	1,632	5,722	3.5	113,314	69.4	338,032	3.39	2.98	33,434	99.885	10.110
WHITESBURG AREA	511	1,493	2.9	24,705	48.3	53,791	2.01	2.18	12,312	99.950	4.369
TOTALS - Hazard District	2,143	7,215	3.4	138,019	64.4	391,823	3.02	2.84	45,746	99.902	8.565

ATTACHMENT C

AEP/Kentucky Power Responses

Kentucky Power Company
Response To Commission Staff's Information Request
Regarding the December 2009 Snow Storm

Question No. 1:

Provide the number of customers per county in your service territory.

Response:

The following table shows customers served per county. The data is derived from KPCo's Customer Information System and represents the active accounts as of January 11, 2010.

COUNTY	NUMBER OF CUSTOMERS
BOYD	24,957
BREATHITT	5,550
CARTER	8,892
CLAY	30
ELLIOTT	23
FLOYD	16,295
GREENUP	15,216
JOHNSON	7,471
KNOTT	8,466
LAWRENCE	7,972
LESLIE	6,004
LETCHER	12,170
LEWIS	253
MAGOFFIN	3,136
MARTIN	5,245
MORGAN	1,318
OWSLEY	13
PERRY	15,915
PIKE	35,173
ROWAN	1,149
Total	175,248

Question No. 2

Provide the peak number of customers without power in each county in your service territory.

Response:

The following table shows the number of customers out per county at the time customer outages peaked for Kentucky Power on our Outage Management System (OMS). The data in this table came from our outage website and due to time delays in the transfer of data from OMS to the website the totals may not match exactly.

County	Customers Out
Boyd	2,526
Breathitt	3,429
Carter	540
Clay	30
Elliott	2
Floyd	5,340
Greenup	51
Johnson	2,001
Knott	6,961
Lawrence	3,632
Leslie	5,539
Letcher	8,596
Lewis	0
Magoffin	652
Martin	2,062
Morgan	24
Owsley	13
Perry	7 ,065
Pike	26,612
Rowan	0

Question No. 3:

Out of the 204 broken poles:

a. How many broken poles did you have within the station zone?

b. How many broken poles did you have beyond the station zone?

c. How many broken poles had to be hand set?

Response:

a. There were six broken poles within the station zone.

b. There were 198 broken poles beyond the station zone.

c. The Company does not have the information readily available to determine the exact number of hand sets. It is estimated that approximately half of the poles replaced were in difficult locations requiring either special equipment or hand setting to complete the replacements.

Kentucky Power Company
Response To Commission Staff's Information Request
Regarding the December 2009 Snow Storm

Question No. 4:

Provide right-of-way budget/actual for each service center from 2005 – 2010.

Response:

The following table shows the total Capital and O&M budgets and actual expenditures for R/W maintenance in Kentucky.

YEAR	ASHLAND BUDGET	ASHLAND Actual	HAZARD BUDGET	HAZARD Actual	PIKEVILLE BUDGET	PIKEVILLE Actual	TOTAL BUDGET	TOTAL Actual
2005	$2,298,361	$2,074,997	$2,977,202	$2,687,865	$4,422,164	$3,992,399	$9,697,727	$8,755,261
2006	$2,425,519	$2,299,221	$3,507,028	$3,324,414	$4,567,536	$4,329,701	$10,500,083	$9,953,336
2007	$2,135,476	$2,241,450	$3,269,948	$3,432,221	$4,127,951	$4,332,804	$9,533,375	$10,006,475
2008	$2,856,705	$2,794,509	$3,352,358	$2,901,244	$3,858,253	$4,007,404	$10,067,316	$9,703,157
2009	$2,793,084	$2,713,359	$3,223,188	$2,893,617	$3,659,728	$3,880,293	$9,676,000	$9,487,269
2010	$2,046,890	N/A	$2,578,847	N/A	$2,874,264	N/A	$7,500,001	N/A

Kentucky Power Company
Response To Commission Staff's Information Request
Regarding the December 2009 Snow Storm

Question No. 5:

Provide outage numbers (indices) for your 10 worst performing circuits for 2009.

Please separate the information as requested below.

a. What were the performance indices of these circuits beyond the station zone?

b. What were the performance indices of these circuits within the station zone?

Response:

Kentucky Power Company
2009 Worst Performing Circuits
(Excluding IEEE-defined Major Events)

	Year	Outages	Customers	Cust Min Interr	SAIFI	CAIDI	SAIDI
Outside Breaker Zone	2009	726	39,411	12,688,734	5.225	322.0	1682.2
Inside Breaker Zone	2009	23	9,604	1,907,243	1.273	198.6	252.8
Total	2009	749	49,015	14,595,977	6.498	297.8	1935.0

Question No. 6

What were the performance indices of all Kentucky Power circuits for 2009? Please separate the information as requested below.

a. For all cumulative circuits within station zones.

b. For all cumulative circuits beyond station zones.

Response:

Kentucky Power Company
2009 System Performance
(Excluding IEEE-defined Major Events)

	Year	Outages	Customers	Cust Min Interr	SAIFI	CAIDI	SAIDI
Outside Breaker Zone	2009	9,450	296,964	68,092,483	1.709	229.3	391.9
Inside Breaker Zone	2009	156	110,092	14,230,709	0.634	129.3	81.9
Total	2009	9,606	407,056	82,323,192	2.343	202.2	473.9

Question No. 7

How much mutual aid did you have?

Response:

A total of 979 employees from other AEP companies and outside contract firms assisted in KPCo's restoration efforts. Of these personnel, 671 were line personnel, 123 were tree personnel and 185 assisted in damage assessment and various support duties.

Question No. 8:

How much aid from other AEP territory?

Response:

There were 132 AEP personnel who assisted:

a. AEP Ohio - 89 line personnel and 10 assessing/support personnel;

b. Indiana & Michigan Power - 26 assessing/support personnel;

c. AEPSC - 7 assessing/support personnel;

d. Many of the contract personnel who assisted normally work for other AEP operating companies.

Question No. 9:

Did you max out on restoration workforce, or could you have used more but chose not to?

Response:

This is a very difficult question to answer succinctly since service restoration conditions can be very fluid with multiple inputs influencing decisions which have to be made. There are also several different parameters which could be "maxed" out and result in stopping one's search for more resources. From the Company's perspective these parameters could be the inability to manage more field resources, no more available lodging, too many field resources in a small geographical area, and whether or not there are any resources close enough to be able to get to the outaged area before the work is completed.

Most of the outside help arrived on December 19, 20 and 21. The last crews to arrive came from such far away locations as Michigan, Missouri, Mississippi, Arkansas and Kansas. At that time there were no other crews available to KPCo unless we decided to take crews which were two days travel away from our locations. After an initial assessment, it was believed that the Company had enough resources to complete the restoration by December 26 or 27. The Company was reaching its limit as to the ability to manage this many crews and in some locations there were not enough accommodations for any more resources.

As the Company completed more assessment of our system, it was realized that there was a need to pick up some more crews if available. The Company was able to pick up more crews which were released by nearby utilities as they were finishing up their restoration work. These crews arrived on December 23, 25 and 26. Kentucky Power also moved crews internally from Ashland to Pikeville and Hazard, as the Ashland district finished up their work.

Question No. 10

How many outside crews were capable of hand setting poles or otherwise experienced in working in mountainous areas?

Response:

Most of the crews were capable of hand setting poles however a lot of them did not have much experience in working in mountainous terrain. It is very difficult to find many available crews which are experienced with construction in the mountains when most of the utilities serving in the mountainous areas are working through their own major storm restoration efforts. The Company tries to minimize the impact of inexperience in the mountains by managing the crew assignments.

Question No. 11:

Are you still just doing routine trimming only as far as the first recloser out from each substation?

Response:

Kentucky Power Forestry's goal is to maintain our Feeder Breaker Zones on a three-year cycle. Feeder Breaker Zone maintenance is not and never has been the only maintenance performed on our lines. Other work beyond the Feeder Breaker Zone includes reclearing of some second and third recloser zones beyond the Feeder Breaker Zones, some full circuit reclearing, and maintenance of selected line segments with a history of poor reliability performance due to tree issues. Right-of-Way widening is also performed on lines outside of the Feeder Breaker Zones. Additionally, a majority of our ground spray work is being performed on rights-of-way beyond the Feeder Breaker Zones.

Question No. 12:

How many pieces of rough terrain equipment do you have (crawler tractors and crawler rigs)?

Response:

Many of the Company's digger/derricks, bucket trucks and pickups used in the day-to-day work are four-wheel drive equipped. The Company owns one track digger, one track material handler and two back yard machines. During this snow storm KPCo rented bull dozers and cranes to help complete the work in some very difficult locations. Some of the contractors assisting with the restoration brought in back yard machines which were utilized in the effort. Four-wheel drive ATV's were also used to patrol lines or transport men and materials to facilities in remote locations.

Kentucky Power Company
Response To Commission Staff's Information Request
Regarding the December 2009 Snow Storm

Staff Second Information Request to
Kentucky Power Company dated February 5, 2010

Request:

In response to the Commission's 1st Set of questions, Item No. 4 show the totals for capital, O&M and R/W maintenance listed below.

YEAR	ASHLAND BUDGET	ASHLAND Actual	HAZARD BUDGET	HAZARD Actual	PIKEVILLE BUDGET	PIKEVILLE Actual	TOTAL BUDGET	TOTAL Actual
2005	$2,298,361	$2,074,997	$2,977,202	$2,687,865	$4,422,164	$3,992,399	$9,697,727	$8,755,261
2006	$2,425,519	$2,299,221	$3,507,028	$3,324,414	$4,567,536	$4,329,701	$10,500,083	$9,953,336
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2009	$2,793,084	$2,713,359	$3,223,188	$2,893,617	$3,659,728	$3,880,293	$9,676,000	$9,487,269
2010	$2,046,890	N/A	$2,578,847	N/A	$2,874,264	N/A	$7,500,001	N/A

1. Please provide a brief description of what each category would include:
   a. Capital
   b. O&M
   c. Right-of-Way Maintenance

Response:

Following is a brief description of categories capital, O&M and right-of-way maintenance:

a. Capital accounts for the:
   - Widening of rights-of-way
   - Tree Removals equal to or greater than 18" diameter
   - Tree trimming associated with Widening
   - Initial Tree Growth Regulator application
   - First & Second Herbicide application following initial clearing

b. O&M accounts for work associated with existing rights-of-way except as noted in Capital:
   - All trimming, brush spraying, and brush cutting
   - All tree removals less than 18" diameter

c. Right-of-Way Maintenance:
   - Right-of-Way Maintenance describes activities associated with maintaining existing rights-of-way. The work is classified to either Capital or O&M per the descriptions shown in (a) and (b) above.

Kentucky Power Company
Response To Commission Staff's Information Request
Regarding the December 2009 Snow Storm

Staff Second Information Request to
Kentucky Power Company dated February 5, 2010

Request:

2. Please separate the information [in chart shown above] as requested below:

   a. Ashland
      1. Capital: budget and actual from 2005 – 2010
      2. O&M: budget and actual from 2005 – 2010
      3. R/W maintenance: budget and actual from 2005-2010

   b. Pikeville
      1. Capital: budget and actual from 2005-2010
      2. O&M: budget and actual from 2005 – 2010
      3. R/W maintenance: budget and actual from 2005 – 2010

   c. Hazard
      1. Capital: budget and actual from 2005 – 2010
      2. O&M: budget and actual from 2005 – 2010
      3. R/W maintenance: budget and actual from 2005 – 2010

Response:

The following charts demonstrate the right-of-way maintenance by Capital and O&M and by budget and actual amounts for the total company and each area.

KENTUCKY POWER

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$2,230,477	$2,180,314	$7,467,250	$6,574,947
2006	$1,668,587	$2,056,916	$8,831,496	$7,896,420
2007	$2,993,480	$3,010,248	$6,539,895	$6,996,227
2008	$2,680,316	$2,523,519	$7,387,000	$7,179,638
2009	$2,675,980	$2,912,459	$7,000,000	$6,574,810
2010	$1,000,001	N/A	$6,500,000	N/A

ASHLAND

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$528,623	$518,749	$1,769,738	$1,556,248
2006	$385,337	$459,844	$2,040,182	$1,839,377
2007	$670,539	$598,467	$1,464,937	$1,642,983
2008	$794,081	$762,901	$2,062,624	$2,031,608
2009	$772,457	$873,702	$2,020,627	$1,839,657
2010	$273,371	N/A	$1,773,519	N/A

PIKEVILLE

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$ 1,017,098	$ 906,275	$ 3,405,066	$ 3,086,124
2006	$ 725,633	$ 736,049	$ 3,841,903	$ 3,593,652
2007	$ 1,296,177	$ 1,464,488	$ 2,831,774	$ 2,868,316
2008	$ 979,050	$ 1,102,036	$ 2,879,203	$ 2,905,368
2009	$ 1,012,136	$ 1,303,778	$ 2,647,592	$ 2,576,515
2010	$ 378,311	N/A	$ 2,495,953	N/A

HAZARD

YEAR	CAPITAL Budget	CAPITAL Actual	O&M Budget	O&M Actual
2005	$ 684,756	$ 755,290	$ 2,292,446	$ 1,932,575
2006	$ 557,617	$ 861,023	$ 2,949,411	$ 2,463,391
2007	$ 1,026,764	$ 947,293	$ 2,243,184	$ 2,484,928
2008	$ 907,185	$ 658,582	$ 2,445,173	$ 2,242,662
2009	$ 891,387	$ 734,979	$ 2,331,781	$ 2,158,638
2010	$ 348,319	N/A	$ 2,230,528	N/A

ATTACHMENT D

PSC 2005 Inspection Report

Commonwealth of Kentucky
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-0615
Telephone: (502) 564-3940
Fax: (502) 564-1582
psc.ky.gov

August 5, 2005

Mr. Errol K. Wagner
Director of Regulatory Services
Kentucky Power
101A Enterprise Drive, P.O. Box 5190
Frankfort, KY 40602-5190

RE: Utility Inspection Report – Kentucky Power - Hazard/Whitesburg Operations Center

Dear Mr. Wagner:

On July 26-28, 2005, Mr. Jeff Moore conducted a Routine Field Inspection of Kentucky Power's Hazard/Whitesburg Operations Center in Hazard and Whitesburg, Kentucky. A copy of the report of that inspection is attached for your review. There was one deficiency found during the comprehensive inspection. The previous inspection of these facilities was in May 2001. During that comprehensive inspection, two deficiencies were found and were corrected in a timely manner.

You will note that one deficiency was found during the inspection. You are requested to respond to this report, outlining corrective actions for the cited deficiency by September 6, 2005. Please provide your response on copies of the Deficiency Tracking Reports sent with this letter by completing the three sections under the Response heading for each cited deficiency.

If you have any questions or need additional information, please contact Mr. Moore at (502) 564-3940. We appreciate your continued interest in the safe operation of your electric facilities.

Sincerely,

John V. Shupp, P.E.
Manager, Electric Branch
Division of Engineering

JVS:JM:dcp
E:\Inspections\Electric Branch\Moore\KP-072605
Attachments

cc: Timothy C. Mosher
President and Chief Operating Officer

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION

UTILITY INSPECTION REPORT

KENTUCKY POWER/AMERICAN ELECTRIC POWER
Hazard/Whitesburg Operations Center

August 3, 2005

Report Number: PSC DTR# KP-072605

BRIEF

Inspector: Jeff Moore

Date of Inspection: July, 26-28, 2005

Type of Inspection: Routine Field Inspection

Type of Facility: Electrical Distribution Operations Center

Name of Utility: Kentucky Power/American Electric Power (AEP)

Location of Facility: Hazard/Whitesburg Operations Center

Purpose of Inspection: Scheduled Routine Field Inspection

Applicable Regulations and Statutes: 807 KAR 5:006, Sections 20, 22, 24-27; 807 KAR 5:041, Sections 5-7.

INSPECTION

Description of utility: Investor-Owned Electric Utility

Number of Customers: 45,000

Area of Operation: Service area encompasses all or part of 5 counties: Breathitt, Knott, Leslie, Letcher, and Perry

Supply Source: AEP

Distribution Description: Primary Voltages: 7.2 KV/12.4 KV/19.9 KV/ 34.5 KV

Workforce Summary: 50 employees

Utility Representative Involved in Inspection: Bruce Lindon, Manager

Date of Last Inspection: May and June, 2001

Number of Deficiencies Documented in Last Inspection: 2

Number of Deficiencies Not Cleared from Last Inspection: None

Summary of Items and facilities inspected: Overall operation of the Hazard and Whitesburg service area. During the routine service and field inspection, it was not possible to review every record relating to all Commission requirements. Therefore, in some instances the results contained in this report are indicative of those items inspected and reviewed on a sample basis. The inspection focused on field and operational issues.

FINDINGS

Deficiency No. 1. Maintenance or Continuity of Service. Probable violation of 807 KAR 5:041, Section 5(1).

Tree Trimming: The utility has not been giving the entire circuit the same attention as the station zone. After the automatic device in the station zone area the right-of-way clearing is greatly reduced. Hot spotting after the station zone is the current practice.

RECOMMENDATIONS

It is recommended that Kentucky Power perform the same level of right-of way clearing on the entire circuit as it has been doing on the station zone. Station zone is a term used by Kentucky Power where the right-of-way has been cleared from the substation to the first automatic device on that circuit. It appears that there is not a process in place to insure that the entire circuit receives timely and complete right-of-way clearing. Also a lot of effort is put into hot spotting through out the service area.

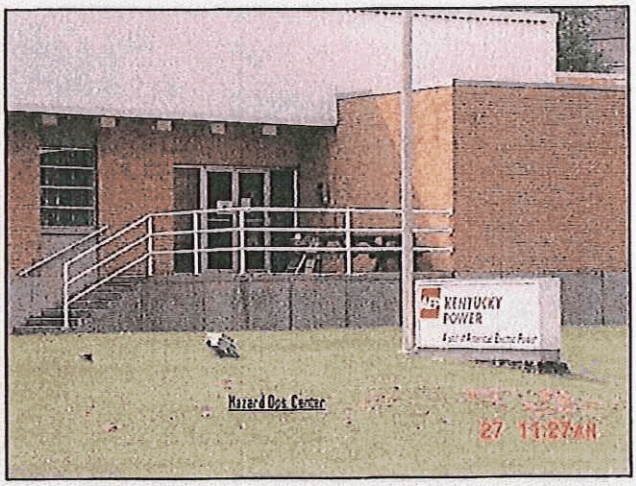
Respectfully submitted,

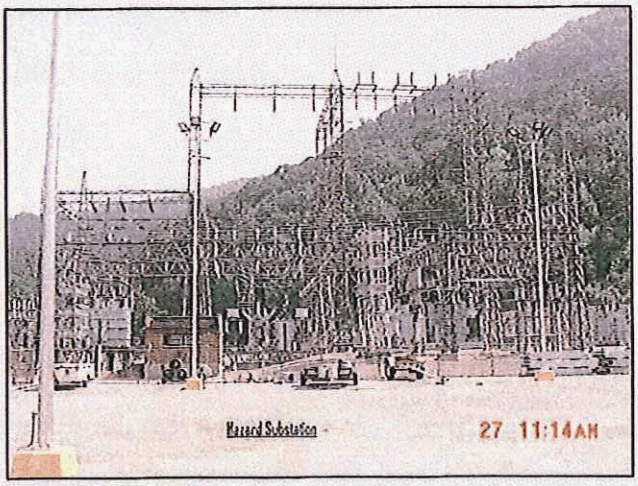
Jeff Moore
Electric Utility Investigator
Electric Branch, Division of Engineering

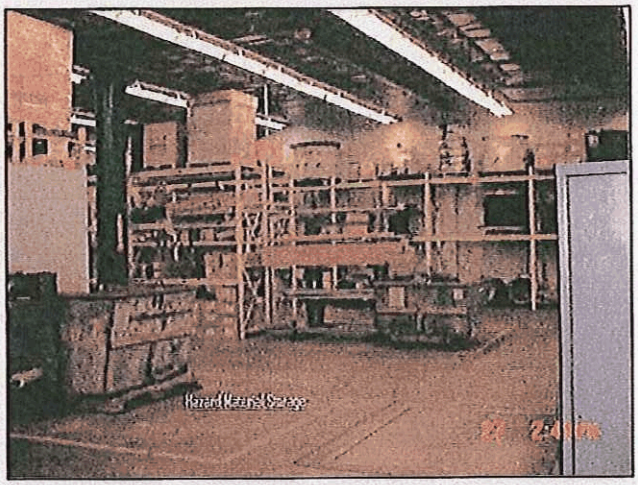
JM:dcp

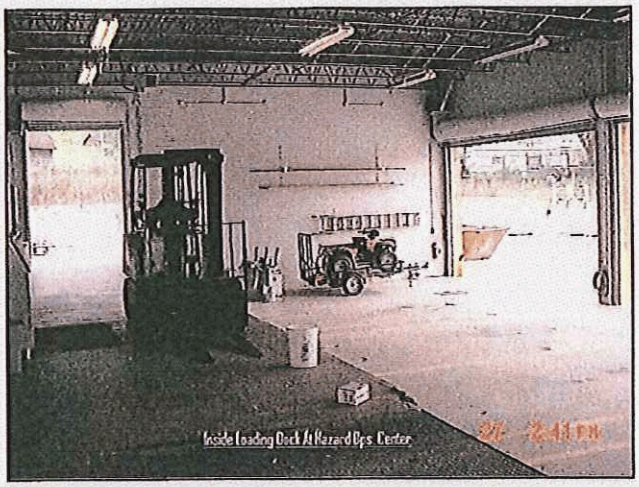
E:\Inspections\Electric Branch\Moore\KP-072605

Attachments

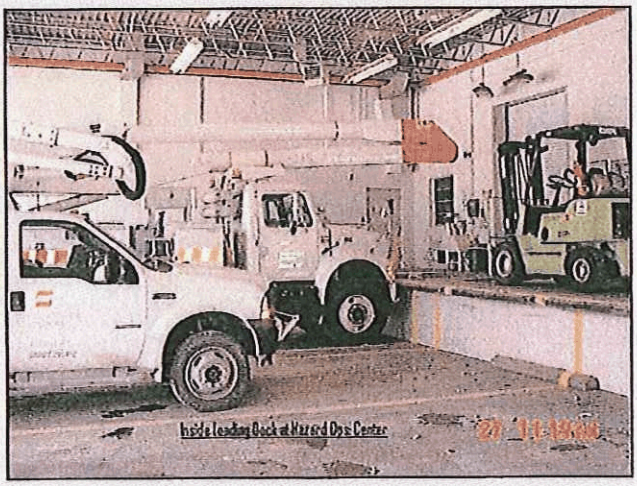

KENTUCKY POWER
Hazard Ops. Center
27 11:27AM

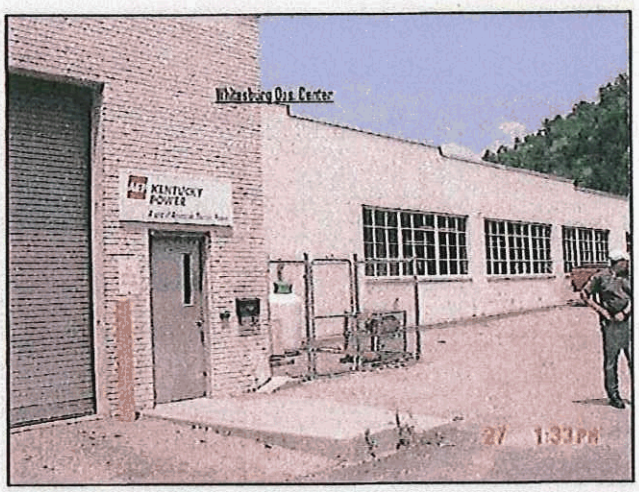

Hazard Substation
27 11:14AM

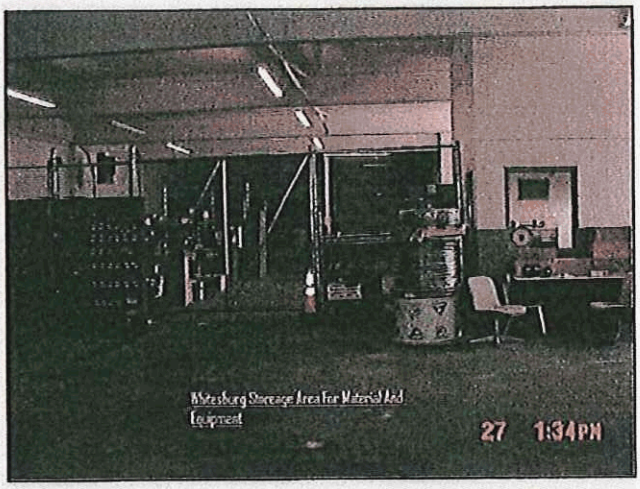

Hazard Material Storage

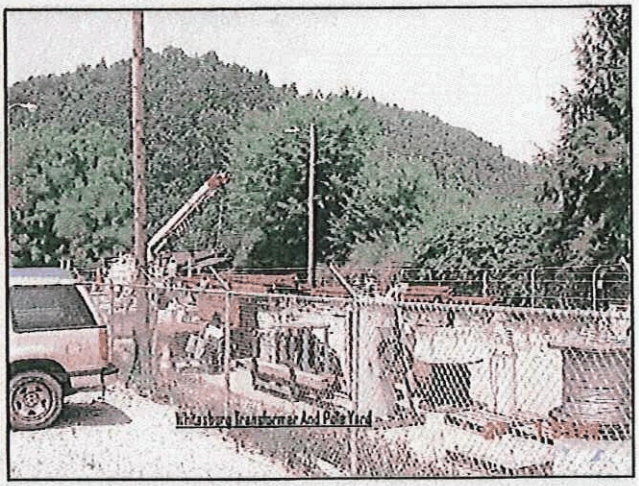

Inside Loading Dock At Hazard Ops. Center


Pole Yard at Hazard Ops. Center
27 11:27AM


Inside Loading Dock at Hazard Ops. Center


Whitesburg Ops Center
KENTUCKY POWER
27 1:33PM


Whitesburg Storeage Area For Material And Equipment
27 1:34PM


Whitesburg Transformer And Pole Yard


Right Of Way Clearing Near Red Bird Hill Area
28 2:43PM


DANGER
KEEP OFF
CAUTION
LOWER
ANTENNA
HARD HA
AREA

Instructions for Deficiency Tracking Report (DTR) Response

July 26, 2005

For each deficiency documented by a PSC investigator, the utility needs to determine:

(1) The underlying cause of the deficiency;

(2) The actions taken to correct the deficiency; and

(3) The actions taken to prevent this deficiency or a similar deficiency from occurring in the future. For example:

1) Explain why the deficiency occurred.

Assume a utility was deficient in its meter testing program. If meters have not been tested in the required time span, why not? Does the utility not have a meter testing program? If there is a program and some meters were not included, why were they not included? If a utility does not have a meter testing program, why not? In general, if you ask why five (5) times and generate meaningful responses, you will come to the root cause of the problem.

2) Explain actions taken to correct the deficiency.

Again if we use the example of the meters, the utility would describe how the meters will be brought into compliance with the regulation. Information regarding who is responsible for completing the work, when it will or has been done, and any supporting evidence of its completion should be sent with the response to the PSC.

3) Explain actions taken to prevent the deficiency from occurring again.

In the example above, this would include the creation of a meter testing management system. The response should include a summary of how the system will work and how it will prevent meters from staying in service beyond the required testing frequency. Information regarding who is responsible for completing the work, when it will or has been done, and any supporting evidence of its completion should be sent with the response to the PSC. Include details regarding who, what, and when.

PSC DTR# KP-072605 Due Date: 9/6/05

Deficiency Tracking Report

Deficiency Detail (grey sections filled in by PSC)

Utility	Date of Investigation	Investigator
Kentucky Power/AEP, Hazard/Whitesburg Operations	7/26-28/05	Moore

Relevant Regulation or Statute:

807 KAR 5:041 Section 5(1) Maintenance and Continuity of Service. Each utility shall make all reasonable efforts to prevent interruptions of service...

Deficiency:

Tree Trimming: The utility has not been giving the entire circuit the same attention as the station zone. After the automatic device in the station zone area the right-of-way clearing is greatly reduced. Hot spotting after the station zone is the current practice.

If this is a repeat deficiency, date of last Deficiency Report: _____

Response (attach additional pages as necessary)

1) Explain why the deficiency occurred. Include information about what caused the deficiency and why it was not detected by the utility.

2) Explain actions taken to correct the deficiency, including utility's responsible person, actions taken, and when it was (or will be) done.

3) Explain actions taken to prevent the deficiency from occurring again, including utility's responsible person, actions taken, and when it was (or will be) done.

Provide evidence of the implementation of the corrective actions (invoices, photographs, work logs, updated documentation, etc.) Attach to this report.

Response Provided by:_____ Date: _____

Signature:_____

PSC DTR # KP-072605 Due Date: 9/6/05

PSC Review

Response Acceptable (Yes or No)

By: Date:

Notes:

Re-Issue Date (1st):
Re-Issue Date (2nd):
Re-Issue Date (3rd):

Followup

Planned date for followup Investigation:
Actual date for followup Investigation:

Were corrective actions implemented?

Investigators opinion on the effectiveness of the corrective actions:

Date DTR Closed:

Comments:

AEP
KENTUCKY POWER
A unit of American Electric Power

Kentucky Power
101A Enterprise Drive
P O Box 5190
Frankfort, KY 40602-5190
aep.com

Mr. John V. Shupp, P.E.
Manager, Electric Branch
Division of Engineering
Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort Kentucky 40602-0615

September 6, 2005

RE: PSC Utility Inspection Report DTR# KP-072605
Kentucky Power Company - Hazard/Whitesburg Operations Center

Dear Mr. Shupp:

The Inspection Report for the Hazard/Whitesburg Areas dated July 26-28, 2005, notes a single deficiency: the probable violation of 807 KAR 5:041, Section 5(1) ("Maintenance or Continuity of Service.") Specifically, the report notes that "the utility has not been giving the entire circuit the same attention as the station zone. After the automatic device in the station zone the right-of-way clearing is greatly reduced. Hot spotting after the station zone is the current practice." As directed by the Commission, the Company responds using the requested format.

1) Explain why the deficiency occurred. Include information about what caused the deficiency and why it was not detected by the utility.

Although all circuit's Station zones are being cleared, Kentucky Power respectfully disagrees that in doing so it violated 807 KAR 5:041, Section 5(1) or that if failed to take all reasonable efforts to prevent interruptions of service.

The fact that the Station zones are more completely cleared than others is the result of two factors. First, it is not practical to clear within a single year the entire 9,592 pole miles of circuits on Kentucky Power's system. As a result, some areas (those most recently cleared) will always be more completely cleared than others. Second, because the 9,592 pole miles of circuit cannot be cleared in a single year, the Company allocates available resources so as to provide the greatest reliability to the largest number of customers.

In carrying out its right of way maintenance, Kentucky Power annually develops in the Fall of each year a vegetation work plan for the following calendar year. One input into these work plans comes from visual inspections, which are performed on approximately 50 percent of

KPC's distribution circuits per year as part of our Distribution Asset Programs. Other inputs into the work plan include historical reliability data, line inspections, customer density, customer complaints and time elapsed since vegetation management was last performed. The plan is kept dynamic and flexible to respond to local needs that may arise during the course of the year.

The main (but not sole) component of the 2005 vegetation management program was to clear completely all Station zones. Kentucky Power elected to do so because outages in these zones affect the largest number of customers. By improving the reliability of these zones Kentucky Power is able to reduce Kentucky Power's overall SAIFI index.

A second component of the program includes complete reclearing of selected circuits. These circuits were chosen based upon their need for clearing and their reliability experience.

A third component is the complete reclearing of other protective zones serving a large number of customers and experiencing a history of recloser operations due to trees.

A fourth component is one commonly referred to as "hot-spotting." However, the name is misleading. When "hot-spotting," the Company typically does more than trim just a tree or two. Rather, it reclears a section of the circuit or laterals on which trees are causing problems. These crews will work in an area for a day or longer completing this trimming.

We continue to monitor the performance of our distribution circuits in our reliability meetings. Corrective measures are put in action as required in our continuing efforts to improve our reliability. This includes aspects of our R/W Maintenance program. This is evidenced by our recent actions to postpone the reclearing of some of the station zones to move to other protective zones where reclearing is deemed to be of higher priority.

2) Explain actions taken to correct the deficiency, including the utility's responsible person, actions taken and when it was (or will be) done.

Prior to receipt of the Commission's Inspection Report and as a result of the Company's continuing evaluation process, the Company had postponed the clearing of 28 Station zones and instead devoted personnel and other resources to clearing approximately 76 miles and approximately 50 other sections of the Company's circuits. Work is on-going throughout the growing seasons but Kentucky Power expects to complete this year's program by the end of the year. The person responsible is Everett G. Phillips, Director of Distribution Operations, 12333 Kevin Avenue, Ashland, Ky 41102, Phone 606/929-1463.

3) Explain actions taken to prevent the deficiency from occurring again, including the utility's responsible person, actions, and when it was (or will be) done.

To meet KPCo customers' growing demands for continued improved reliability, the Company intends to employ a significantly higher level of reliability resources in 2006 then being deployed today. Second, in 2006 the Company will begin the transition to a vegetation maintenance

program tied to the average rate of growth of the trees in any particular area. Of course the Company will continue to monitor the effectiveness of our efforts and will make adjustments to our program as needed to maintain and improve the reliability of our system. The person responsible is Everett G. Phillips His telephone number is 606/929-1463.

Sincerely,

Errol K Wagner
Director Regulatory Service