

FIELD VISIT REPORT

KENTUCKY PUBLIC SERVICE COMMISSION (KPSC)

ELECTRIC ENGINEERING STAFF

INVESTIGATOR: STEVE KINGSOLVER

REASON:

Evaluation of Kentucky Power's (Ky. Power) performance during the December 2009 snow storm.

DATE of FIELD VISITS:

Monday, 1-11-10: To Ky. Power-Pikeville Operations Center
Tuesday, 1-12-10: To Ky. Power-Pikeville Operations Center
Tuesday, 1-19-10: To meeting with Pike County Judge and Emergency Manager,
Pikeville, Kentucky

UTILITY:

Kentucky Power

LOCATION:

Pikeville, (Pike County) Kentucky

PERSON(S) INVOLVED:

Kentucky Power

Bob Shurtleff, Manager, Pikeville Operations
Dennis Massey, Service Supervisor, Pikeville Operations
Mark Jackson, Forestry Coordinator, Pikeville Operations

Pike County Government

Wayne Rutherford, Pike County Judge/Executive
Doug Tackett, Pike County Emergency Management Director
Nee Jackson, Pike County Safety Director
C.J. Childers, Deputy Director, Pike County Emergency Management

SUMMARY:

- On Monday, 1-11-10, I meet with Bob Shurtleff to discuss the purpose for my visit. I was told that Dennis Massey would be assigned to be my field guide. I advised Dennis that I needed to view two of their ten worst performing circuits and four of the hardest hit circuits. It was decided that we would review Johns Creek Sub Raccoon Circuit and Johns Creek Sub Meta Circuit from the ten worst performing circuits. It was then decided we would review the following circuits as part of their worst hit circuits during the December 2009 snow storm: Elwood Sub Dorton Circuit, Elwood Sub Virgie Circuit, Henry Clay Sub Regina Circuit and Henry Clay Sub Ashcamp Circuit. Two additional circuits were reviewed on our second day of our circuit review: Draffin Sub Belcher Circuit and Draffin Sub Olivehill Circuit.
- During the review of these eight circuits, a wide variety of issues were discussed and viewed. Access to these areas was a major issue during this snow storm. This area received eighteen to twenty-four inches of snow making much of the area inaccessible until the roads could be cleared of snow and trees. This would have increased the length of outages in this area.
- Also on the second day of my review of the Pikeville Operations center I met with Mark Jackson, Forestry Coordinator for Kentucky Power. Listed below you will find topics and issues discussed during our meeting:

Discussion on ten worst performing circuit list.

Sliders account for approximately eighty percent of the off right of way tree problems. (A slider is a tree that starts out above the circuit and due to loose soil conditions the tree and soil slide down the mountain and through the circuit).

Kentucky Power now performs vegetation management on performance-based trimming. Mr. Jackson feels good about the program but more resources are needed. The theory of their performance-based trimming is that reliability indexes and other factors are used to determine which circuits should be trimmed. Kentucky Power divides each circuit into zones: inside station zone and outside the station zone. They are now working on a three-year cycle and right of way widening within the station zone. Outside of the station zone there is no set schedule for vegetation management. They do what is called "hot spotting" when a problem area is identified by either employees or customers. In the areas outside of the station zone vegetation management is approximately ninety-five percent reactive.

Kentucky Power has discussed changing to complete system cycle-based vegetation management if funding is made available. For a more detailed description of these issues, see Attachment D.

Unfused tap lines get priority in vegetation management over fused tap lines in their station zones.

Reliability numbers are bid factors in the vegetation management program.

Vegetation Management Issues During the December 2009 Snow Storm

- A more comprehensive vegetation management program would have lessened the affect of the snow storm, but would not have eliminated the complete issue. Trees out of the right of way are an issue and need to be addressed in some form. I viewed fallen trees that started out fifty feet from the circuit and across the road that fell across the road and though the circuit on the other side of the road. I saw trees that slid down the mountain from above the circuit fifty to one hundred feet and went through the circuit (Slider).

Summary of the Meeting with Pike County Government

Information from Pike County Judge/Executive:

- Kentucky Power's right of way is not kept or trimmed as in the past.
- Kentucky Power is not responsive.
- The repair workers that came into Kentucky Power's system to assist in restoring power in the December 2009 snow storm made statements that this system is the worst they have seen. This information came from two sources to the county judge. They were talking about vegetation management and system maintenance.
- Kentucky Power's right of way budget has been reduced with more right of way to maintain.

Information from Pike County Emergency Management Director:

- Pike County provided assistance to Kentucky Power in the form of snow and tree removal from the roadways.

- 68,000 people live in Pike County.
- There are 35,000 Kentucky Power customers in Pike County.
- 26,600 Kentucky Power customers were off service during the December 2009 snow storm.
- Pike County had seventeen to twenty-four inches of snow in the December 2009 snow storm.
- Approximately ninety percent of Kentucky Power's customers in Pike County were off service in the December, 2009 snow storm.
- Access to many areas was an issue. Fire departments were also removing trees from the roadways.
- Pike County had six shelters open, plus fire departments were giving out kerosene and food.
- Kentucky Power is the only electric provider in Pike County.
- Pike County would like for Kentucky Power to provide them with substation locations and the areas served by each circuit. This information would help Pike County know what part of the county would be affected when told that a certain substation or circuit is off service.
- Pike County would like Kentucky Power to have someone in their emergency operations center when a disaster of this type is declared by the county.
- Pike County stated that the local Kentucky Power personnel were good to work with.
- Pike County personnel attending this meeting could not recall a storm of this magnitude that caused this level of power outages.
- Pike County Judge/Executive called me after the meeting to inform me that a Pike County resident has repeatedly called Kentucky Power and requested that trees near the power lines behind his house be trimmed. They repeatedly see arcs in this area caused by trees making contact with the lines. This information has been passed to Kentucky Power and a response was requested when this is evaluated.

Evaluation of Ky. Power's Answers to KPSC Investigator's Questions
(See Attachment B and C for Data Requests)

Question #1: Customers per County

Question #2: Customers off service per county

Question #3: Breakdown of where broken poles were on their system.

This information is important when you look at the vegetation Management plan and the difference practices used in what they call station zone and outside station zone. Ky. Power uses this terminology. A three phase distribution circuit is divided into two areas. A station zone is from the substation to the first recloser on the circuit. From that first recloser to the end of the line is classified as outside of the station zone. The station zone on the circuit is trimmed on a regular cycle and gets adequate vegetation management. The section of the circuit outside the station zone is not on a regular cycle trimming routine. This section is only trimmed when a certain area is brought to the attention of the company by customers or employees.

Question #4: A second data request was issued on this response. Ky. Power has decided to reduce their vegetation management budget for 2010 from \$9,676,000 in 2009 to \$7,500,001 in 2010. The Pikeville Operations Area is seeing a reduction of \$785,000 for 2010. During my field visit in the Ky. Power service area, I did not see an improvement in the condition of the right of way maintenance that would allow for a reduction of the vegetation management budget.

Question #5: This question requested information on the ten worst performing circuits for 2009. I feel this information is very enlightening when evaluating the company's vegetation management practices.

Question #6: This question looks at all of Ky. Power's circuits for 2009. *This breaks the circuits down to station zone and outside the station zone.* This looks at the effectiveness of the vegetation management practices in the different sections of the circuits.

Question #7: Mutual Aid Information (Total)

Question #8: Mutual Aid Information (AEP Personnel)

Question #9: This question addressed Ky. Power's ability to handle the restoration workforce. Ky. Power answered that at one point they felt they had reached their maximum level of being able to handle additional crews. Later in the restoration effort, it was decided that more help was needed and additional crews were added to the restoration effort.

Question #10: This question addressed outside crews ability to hand set poles. Ky. Power's answer states that most of the crews were capable of doing this, the mountainous region was more of a problem for the crews.

Question #11: This question addresses the different practices of vegetation management on their circuits.

Question #12: This question addressed rough terrain equipment. From their answer, it appears they have four pieces of tracked equipment and selected four-wheel drive vehicles.

Conclusion:

After reviewing this body of information along with field visits and interviews with people associated with these issues, it is my opinion now, as it was in 2005, that Kentucky Power should be required to institute a vegetation management program that creates greater clearances between all of their primary circuit conductors and trees. This action should improve reliability issues within Kentucky Power's service area and would remove some of the safety issues that are associated with trees making contact with energized primary conductors. It is also my opinion that the Commission should institute a minimum clearance zone for all regulated electric utilities in Kentucky that would mandate clearances between the utilities' conductors and trees.

Report submitted to: John Shupp, Manager Electric Branch, KPSC

Report filed to: Electronic Filing System

Signed:  **Date:** 2-18-10

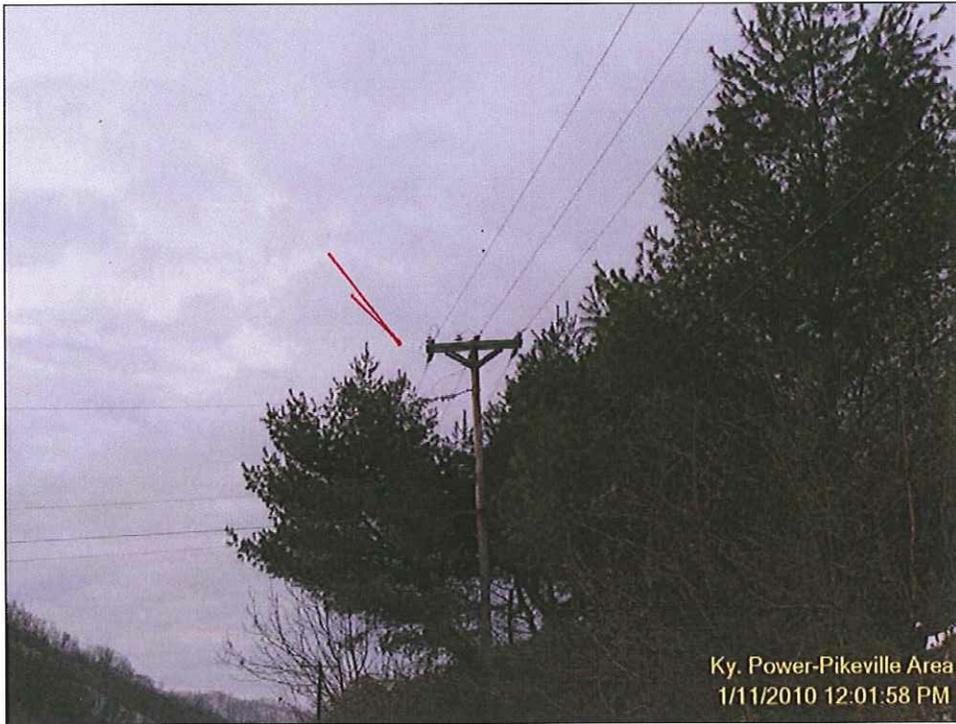
Steve Kingsolver
Electric Utility Investigator
Kentucky Public Service Commission

ATTACHMENTS:

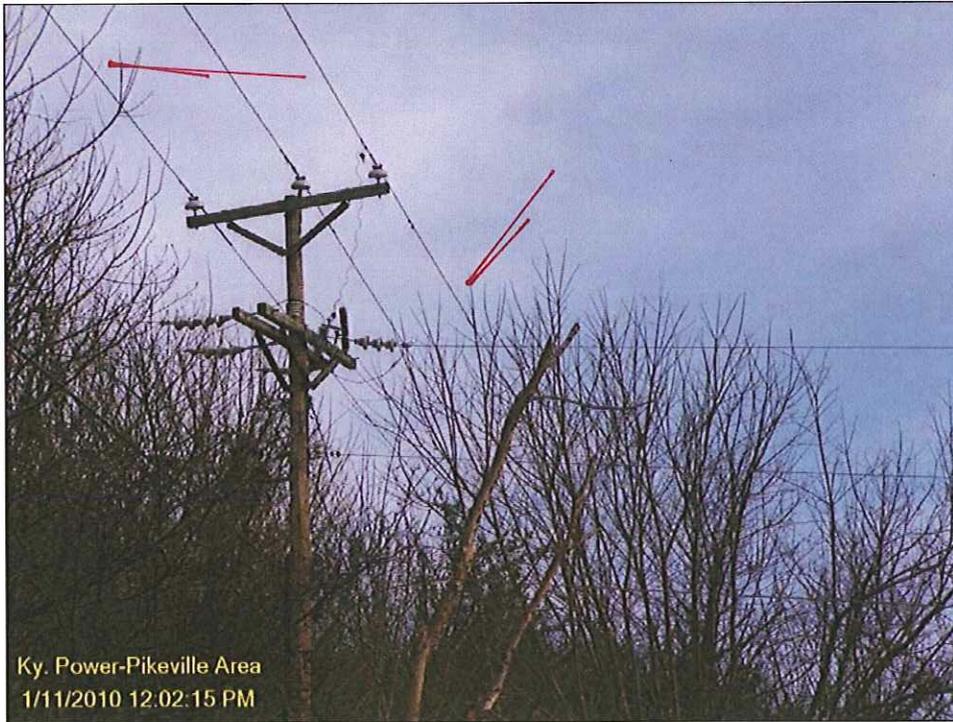
- A. KPSC Photographs of Affected Areas
- B. Ky. Power's Answers to KPSC 1st Data Request
- C. Ky. Power's Answer to KPSC 2nd Data Request
- D. Ky. Power's Current Vegetation Management Plan
- E. Ky. Power's Outages and Customers per County
- F. Ky. Power Outage Timeline
- G. KPSC Maps of Viewed Area
- H. Ky. Power's 2008 Reliability Report
- I. 2-2005 KPSC Inspection Reports citing Vegetation Management Violations
- J. News Article, Whitesburg Mountain Eagle Paper

Attachment A

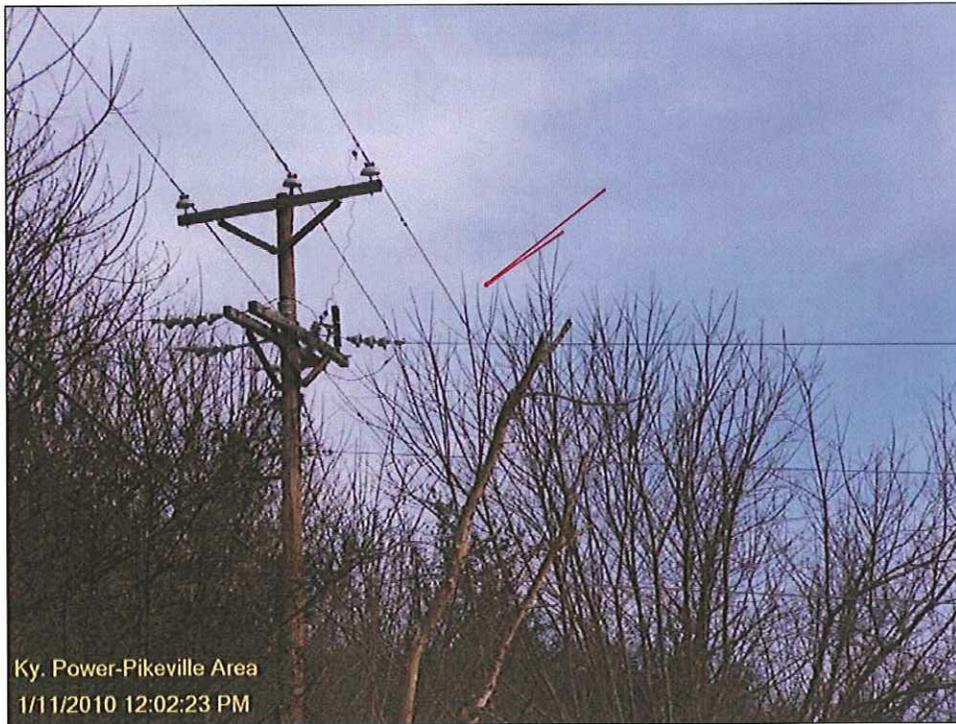
KPSC Photographs of Affected Area



#1



#2



#3



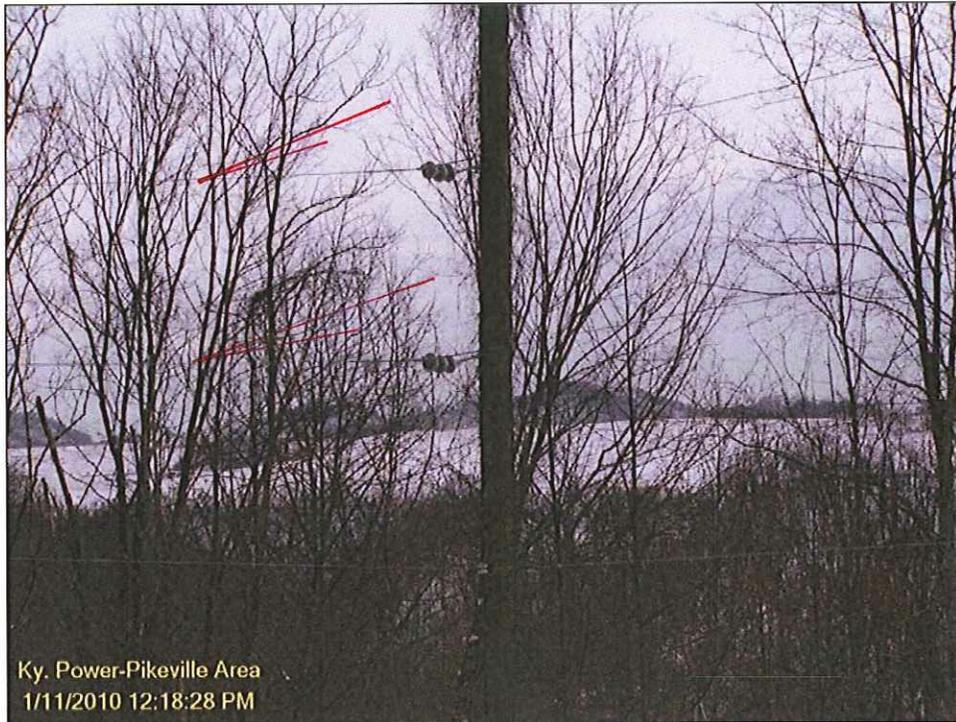
#4



#5



#6



#7



#8



#9



#10



#11



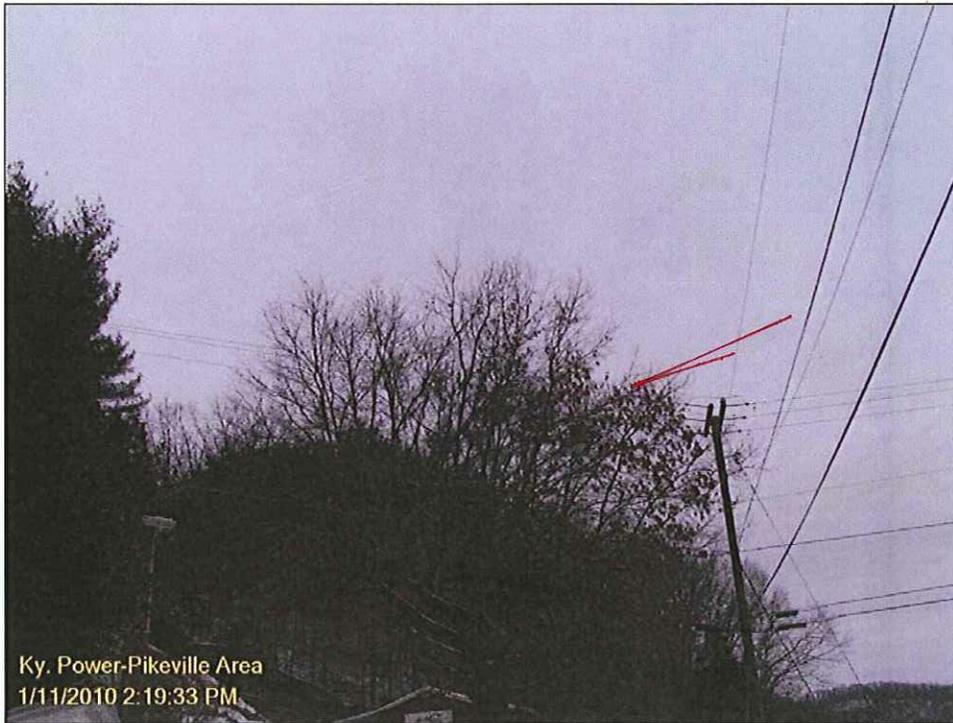
#12



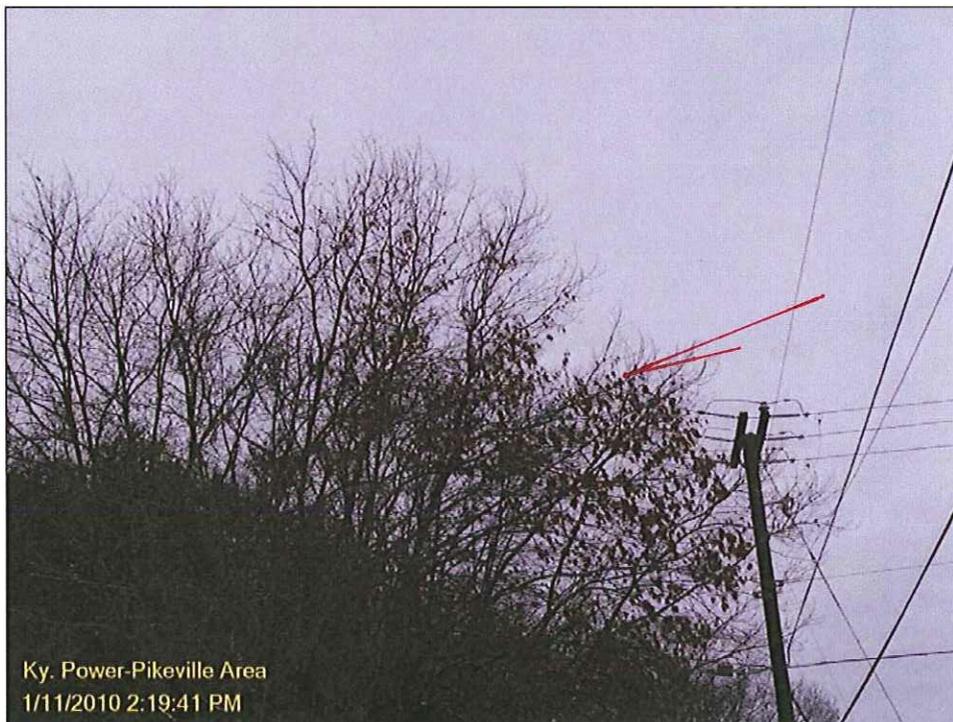
#13



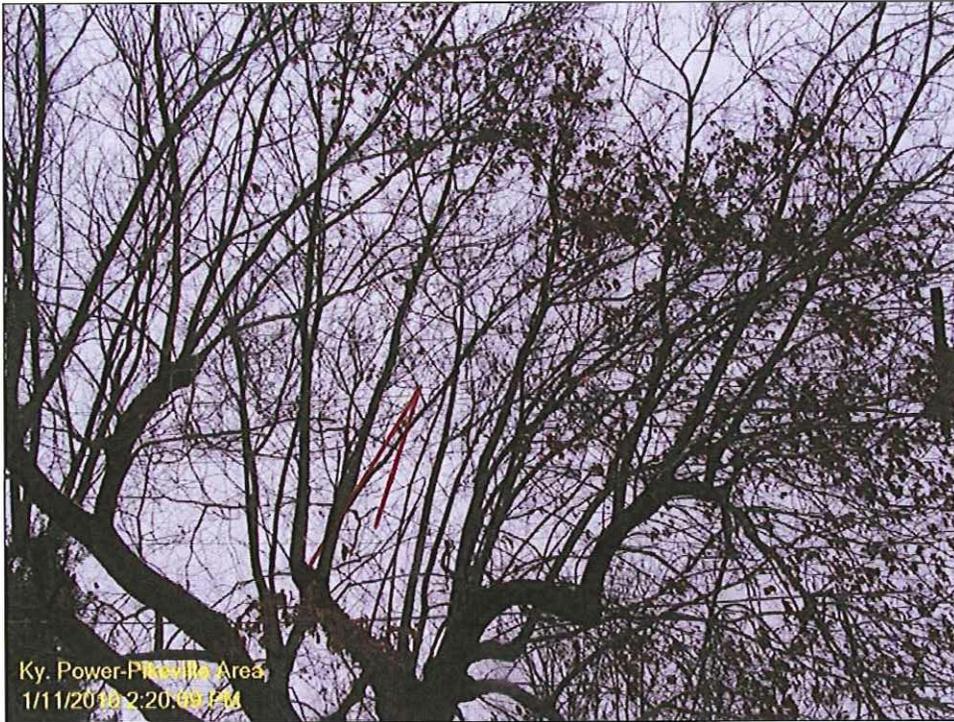
#14



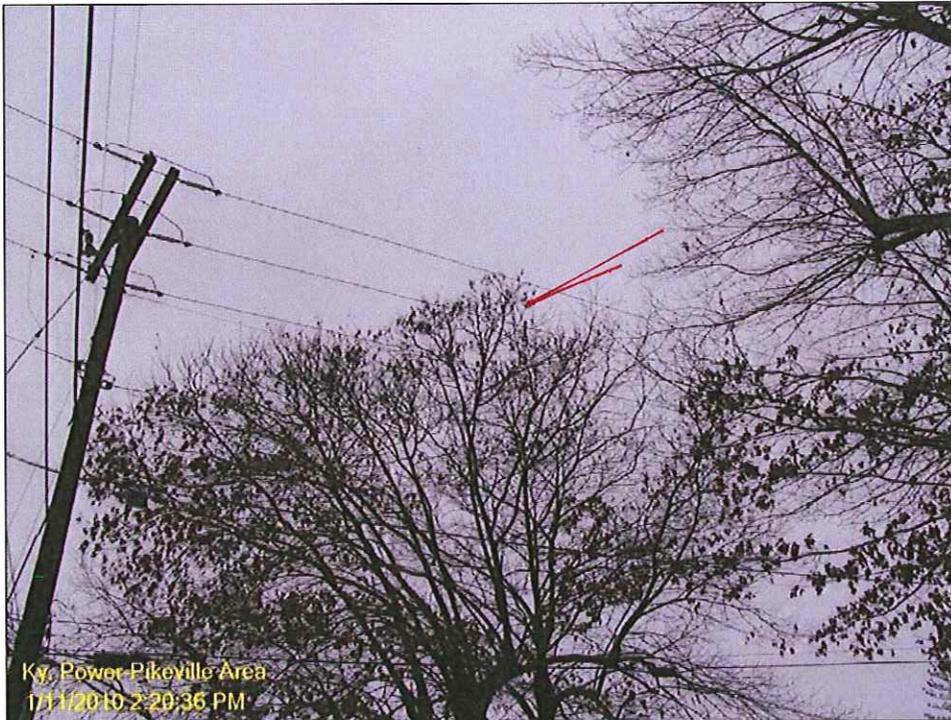
#15



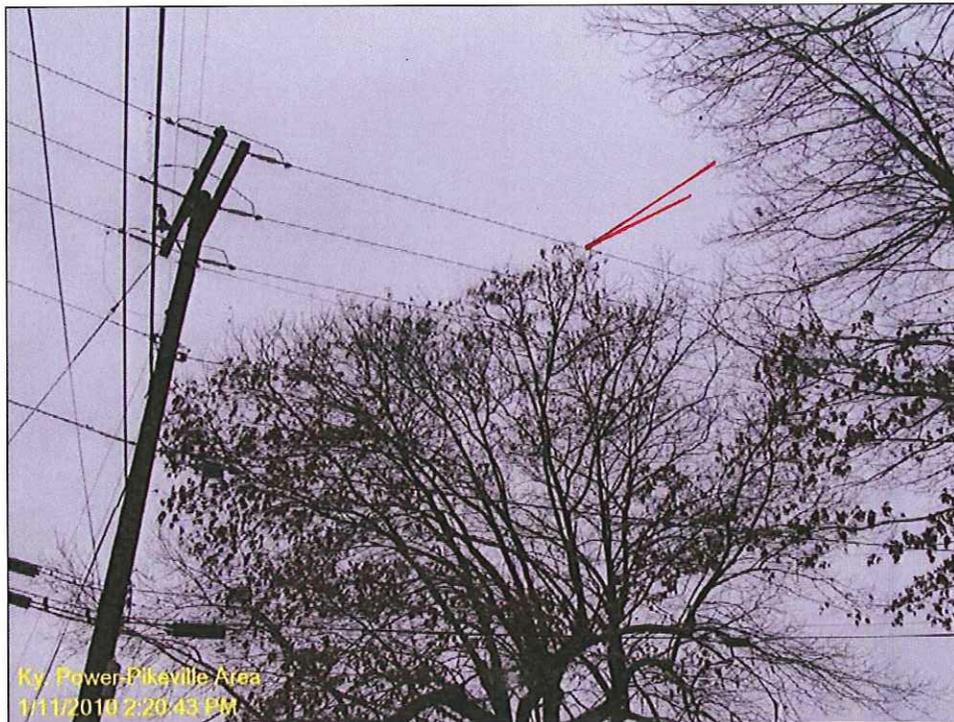
#16



#17



#18



#19



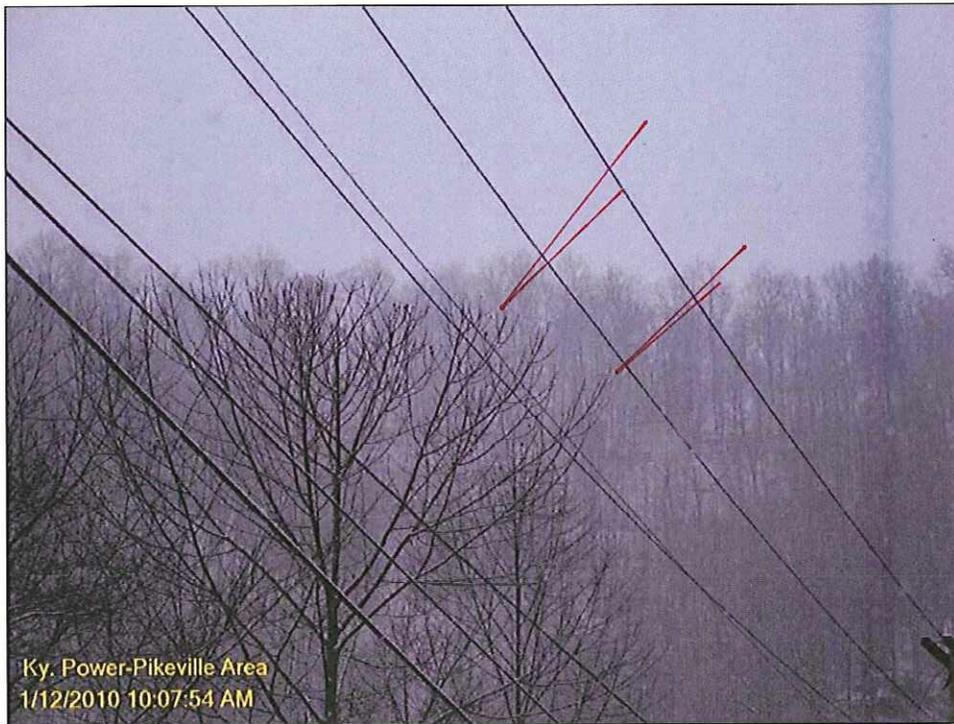
#20



#21



#22



#23



#24



#25



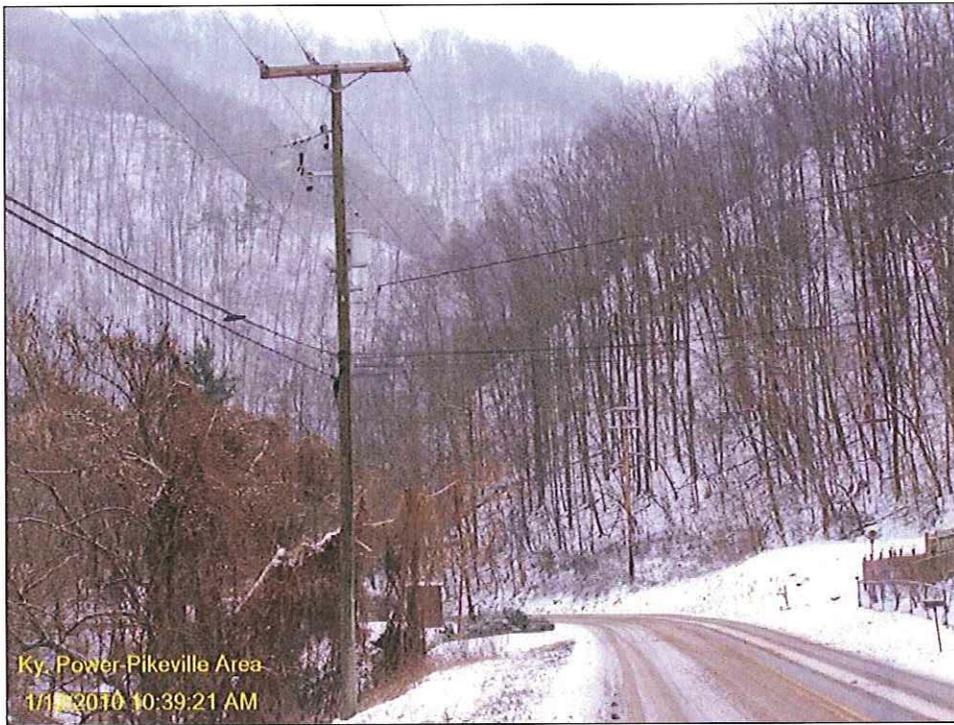
#26



#27



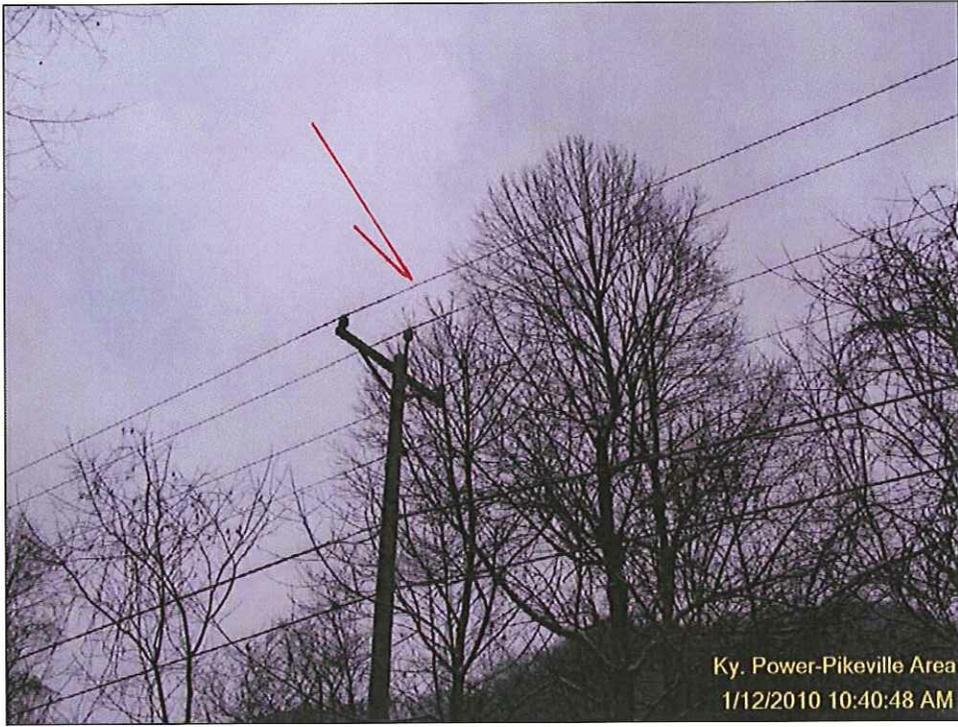
#28



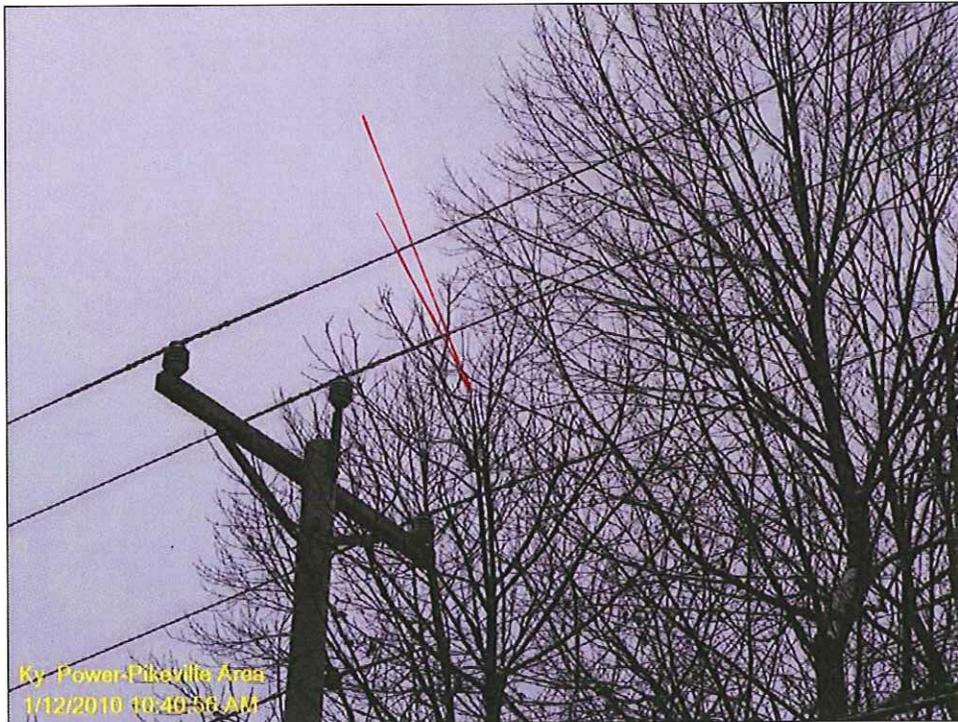
#29



#30



#31



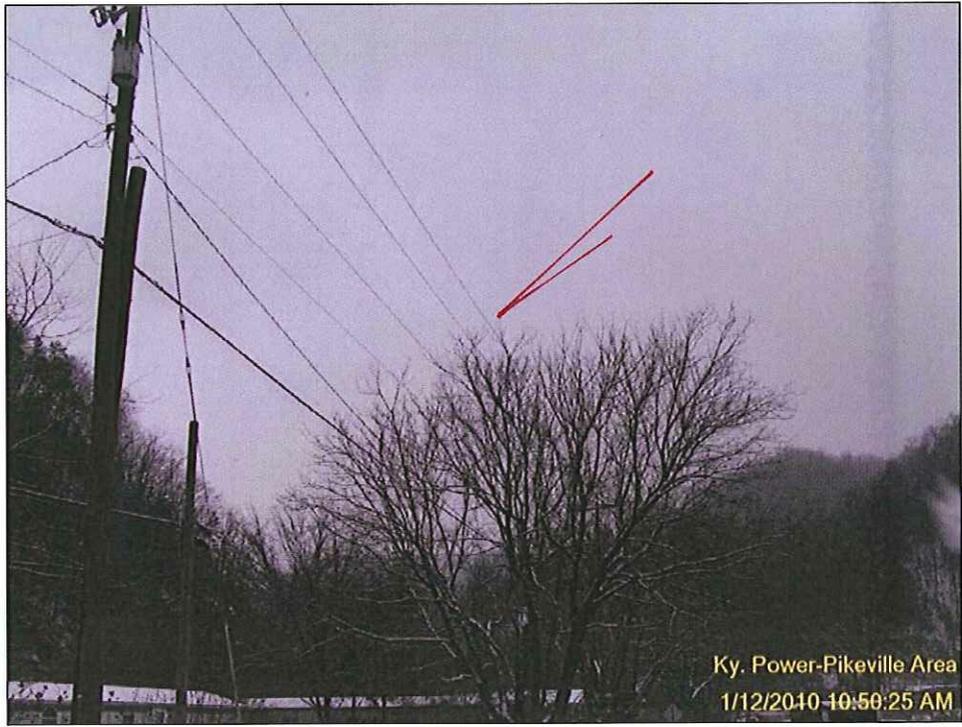
#32



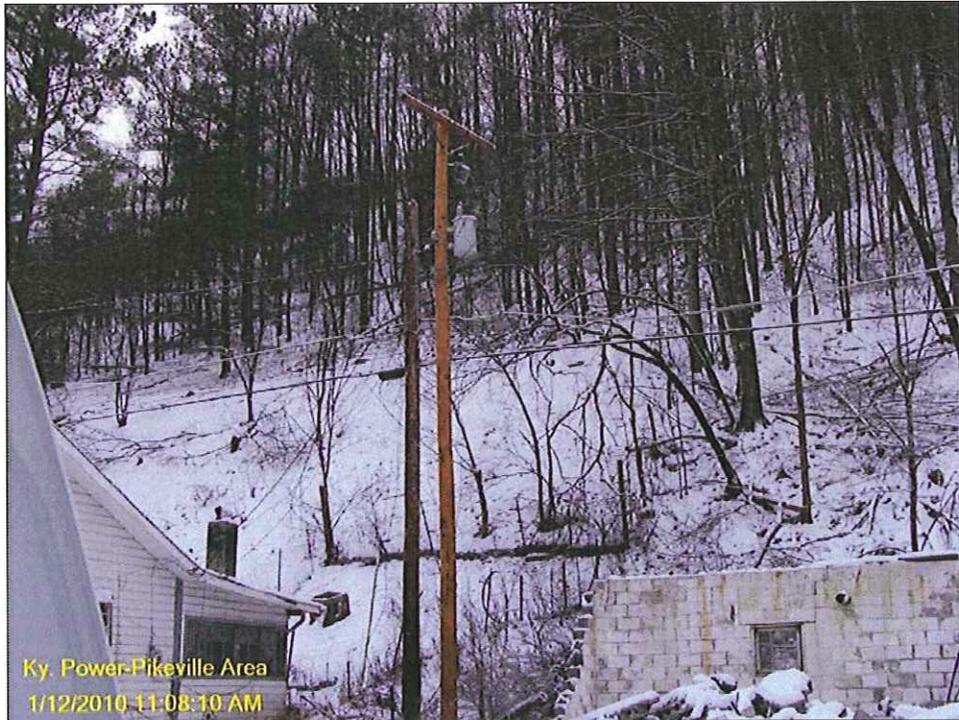
#33



#34



#35



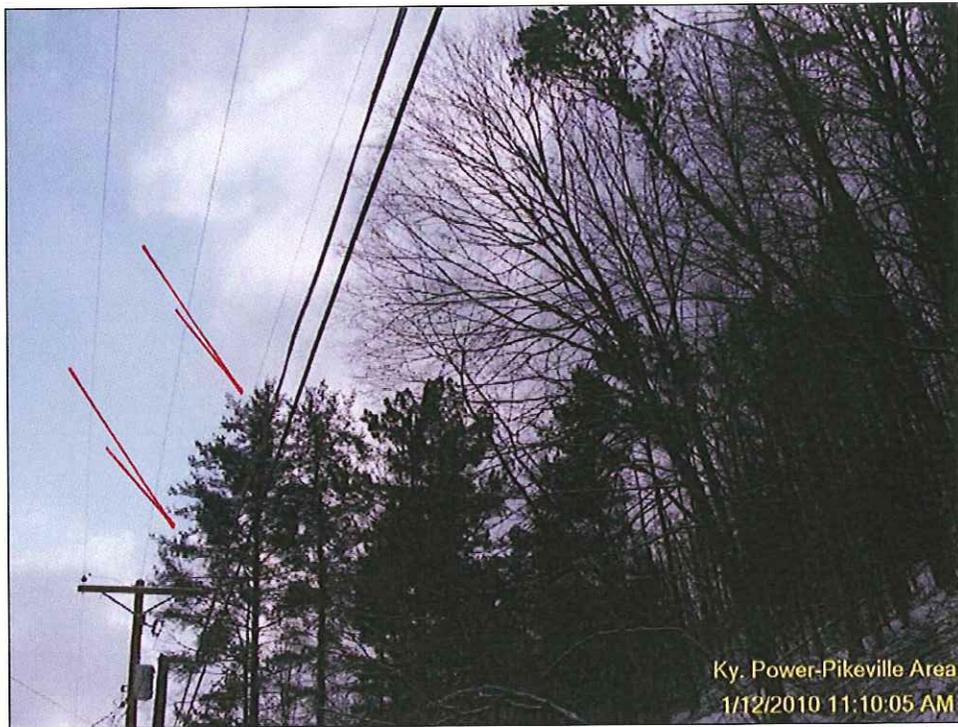
#36



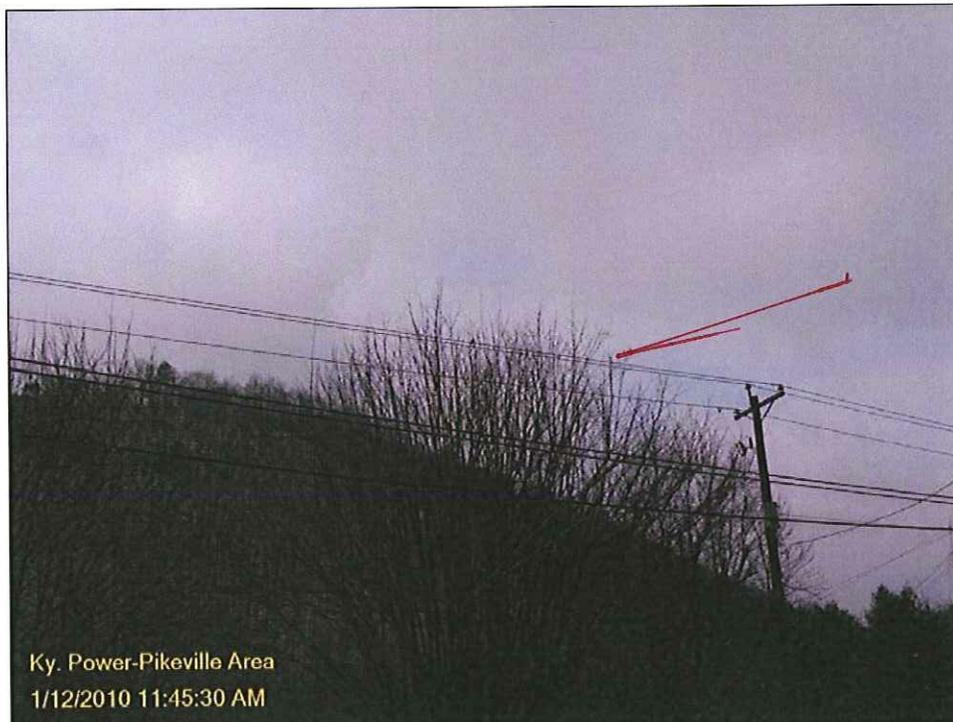
#37



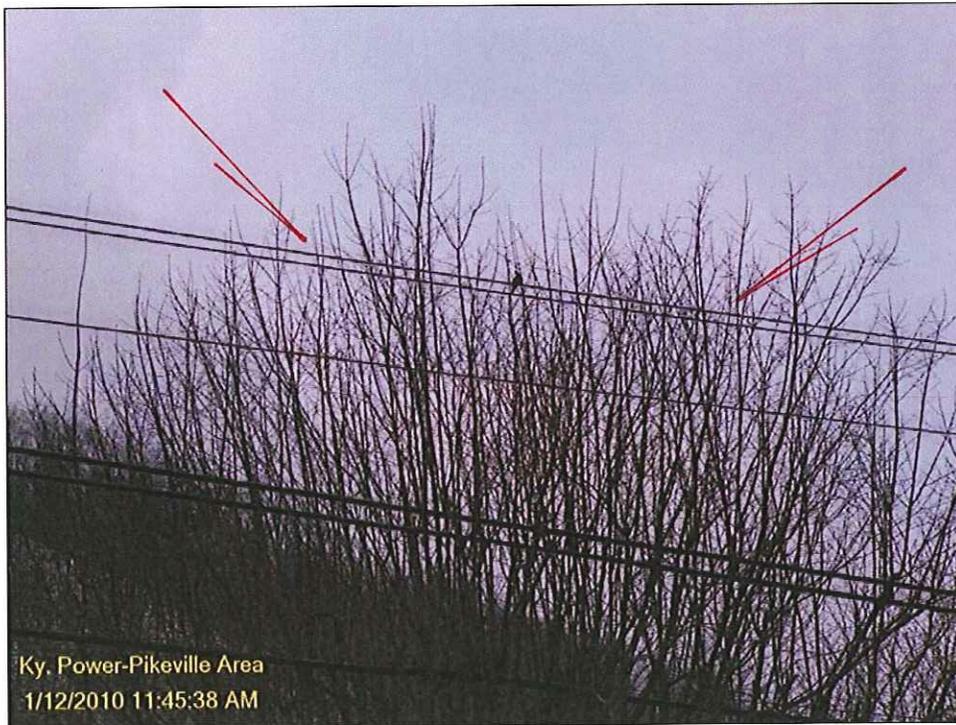
#38



#39

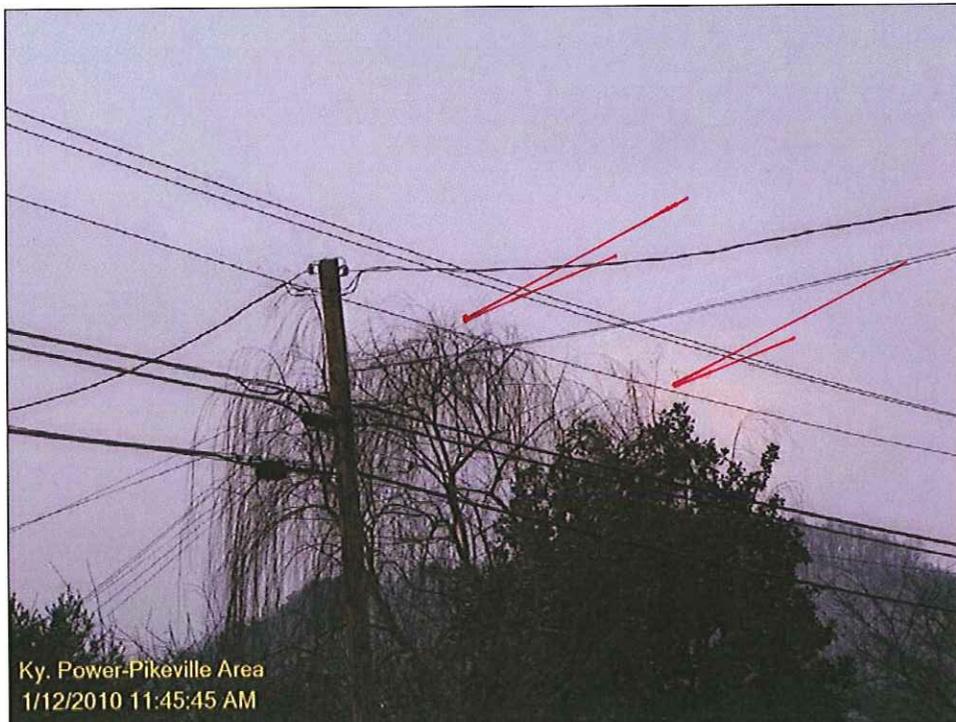


#40



Ky. Power-Pikeville Area
1/12/2010 11:45:38 AM

#41



Ky. Power-Pikeville Area
1/12/2010 11:45:45 AM

#42



#43



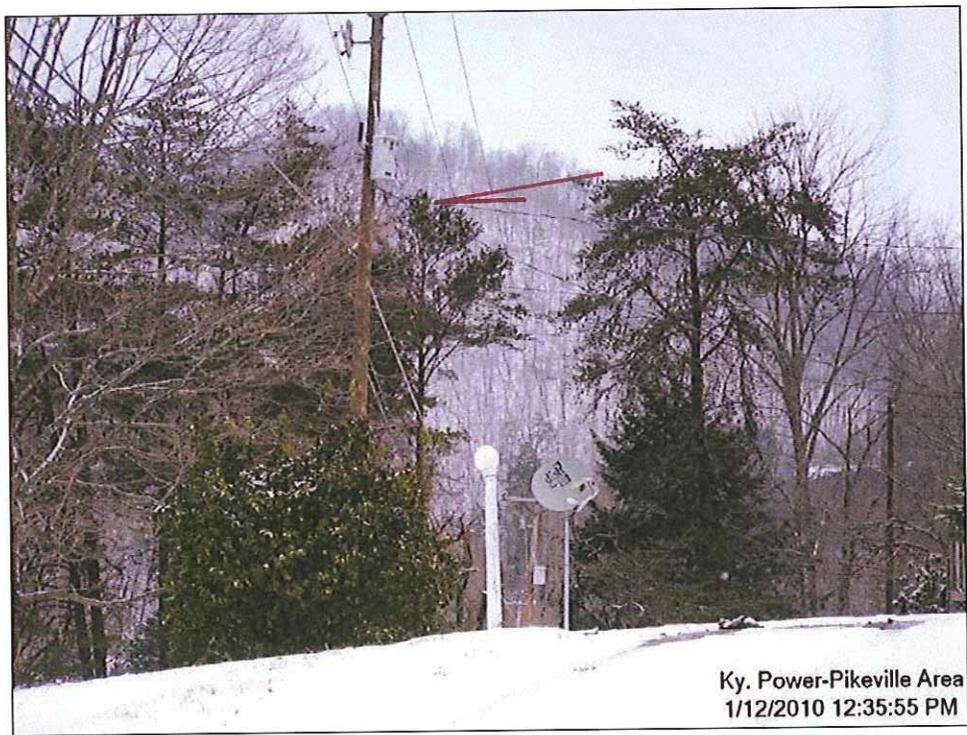
#44



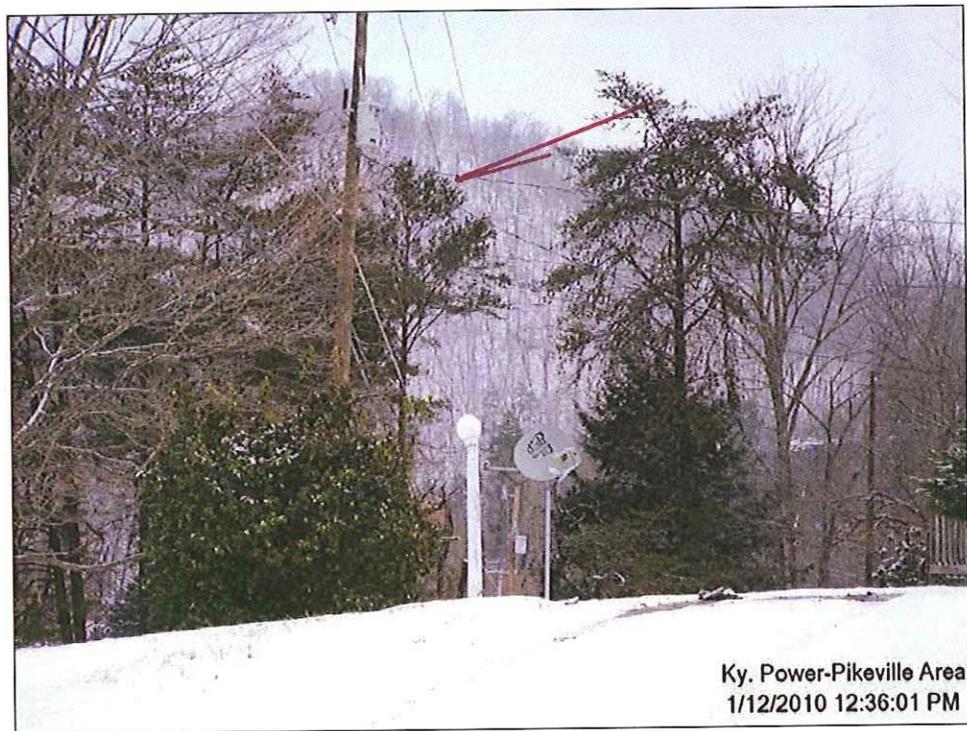
#45



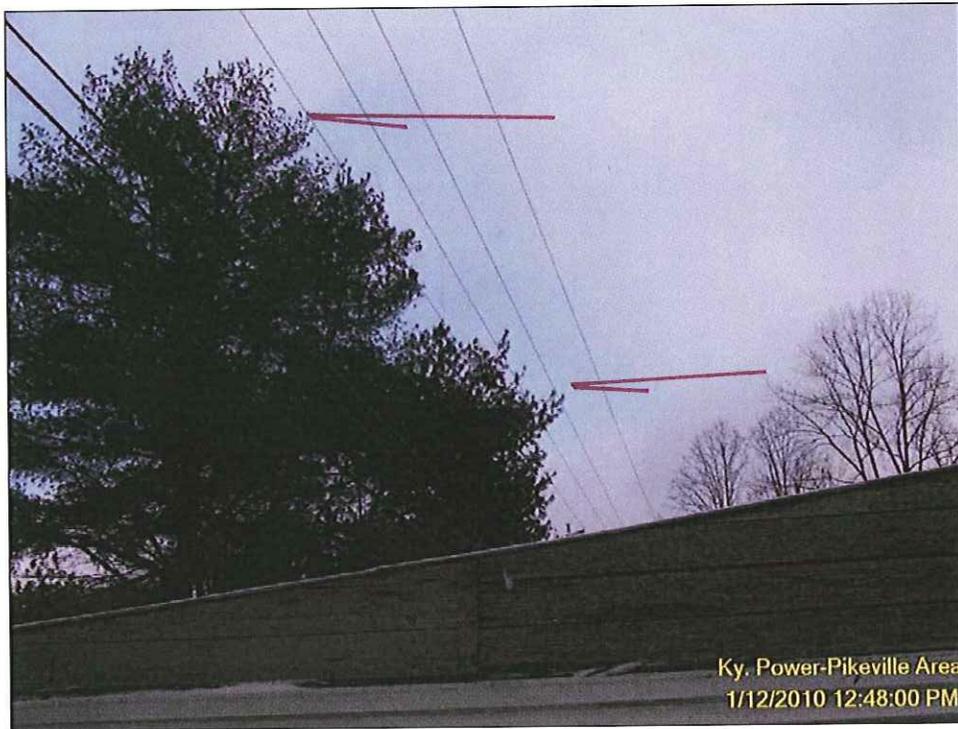
#46



#47



#48



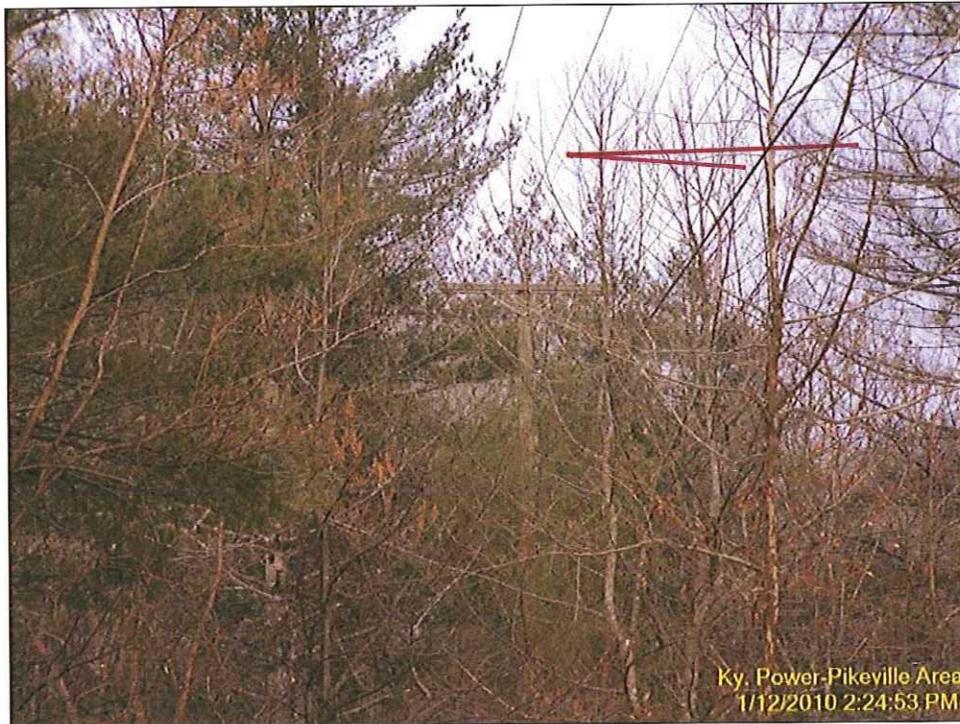
#49



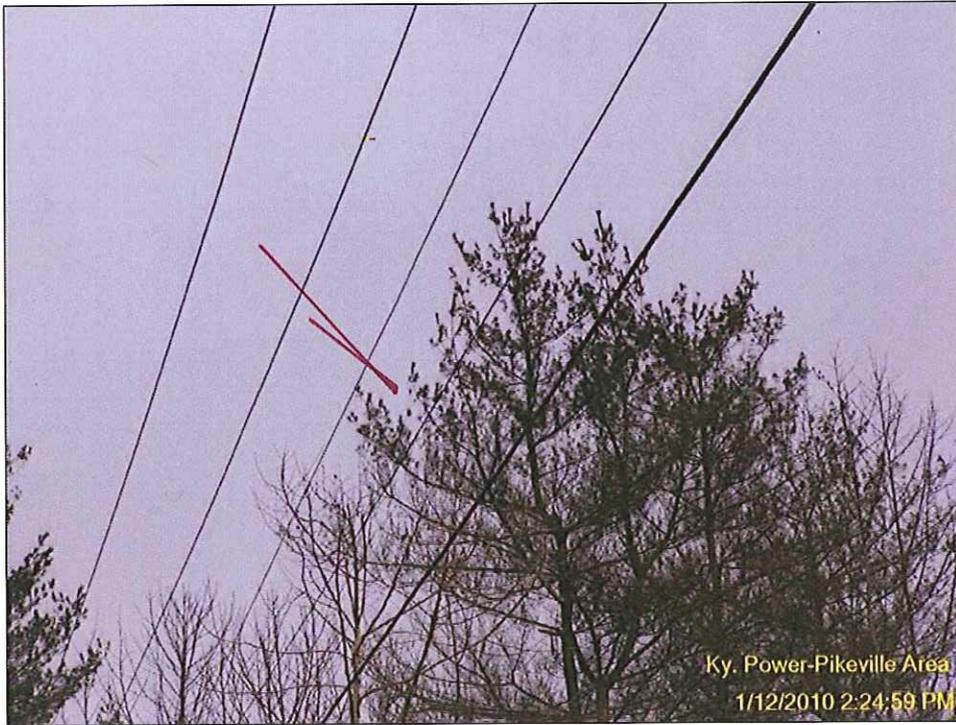
#50



#51



#52



#53



#54



#55

Attachment B

Ky. Power's Answers to KPSC 1st Data Request

Kingsolver



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

Jeff R. Derouen, Executive Director
Public Service Commission of Kentucky
Attn: Steve R. Kingsolver
Jeffrey C. Moore
211 Sower Boulevard
P. O. Box 615
Frankfort, KY 40602-0615

RECEIVED

JAN 26 2010

PUBLIC SERVICE
COMMISSION

January 26, 2010

Re: Kentucky Power Company's Response to the January 8, 2010 Information Request

Dear Mr. Derouen:

Attached is a copy of the Company's response to the January 8, 2010 request for information at it relates to the December 18, 2009 heavy snow storm.

After you or your staff has had a chance to review the enclosed information and should there be additional information required, please feel free to give me a call. I can be reached at 502-696-7010.

Sincerely,

Errol K Wagner
Director of Regulatory Services

Attachments

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.

<u>COUNTY</u>	<u>NUMBER OF CUSTOMERS</u>
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

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

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	,065
Pike	26,612
Rowan	0

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

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

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

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

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

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.

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

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.

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

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.

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

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.

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

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.

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

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.

Attachment C

Ky. Power's Answers to KPSC 2nd Date Request



**KENTUCKY
POWER**

A unit of American Electric Power

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

RECEIVED

FEB 17 2010

PUBLIC SERVICE
COMMISSION

✓ Jeff R. Derouen, Executive Director
Public Service Commission of Kentucky
Attention: Steve R. Kingsolver and Jeffrey C. Moore
211 Sower Boulevard
P. O. Box 615
Frankfort, KY 40602-0615

February 17, 2010

Re: Kentucky Power Company's Response to the Commission Staff's
Second Request for Information dated February 5, 2010

Gentlemen:

Attached is a copy of Kentucky Power Company's response to the Commission's Second Information Request dated February 5, 2010. The attached information pertains to the December 18, 2009 heavy snow storm and the Commission's 1st Set of Data Requests, Item No. 4.

If you have any additional questions regarding to the enclosed information, please feel free to give me a call at 502/696-7010.

Sincerely,

Errol K. Wagner
Director of Regulatory Services

Attachment

**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
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

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

Ky. Power's Current Vegetation Management Plan

KENTUCKY POWER COMPANY DISTRIBUTION VEGETATION MANAGEMENT PLAN

RECEIVED

DEC 26 2007

PUBLIC SERVICE
COMMISSION

Introduction

Pursuant to the Kentucky Public Service Commission Order in Administrative Case No. 2006-00494¹, all jurisdictional electric utilities are to formally develop distribution vegetation management practices and file a copy of same with the Commission on or before December 26, 2007. Kentucky Power Company hereby submits its distribution Vegetation Management Plan. In addition to the vegetation management plan being provided below, a copy of AEP's System Forestry Goals, Procedures & Guidelines was filed as part of Adm. Case No. 2006-00494, Commission's 2nd Set of data request, Item No.10.

Vegetation Management Plan

Kentucky Power Company manages vegetation along approximately 9,700 miles of distribution line within its service territory. Kentucky Power's Vegetation Management Plan (VM Plan) integrates a blend of work methods to achieve long-term goals and address short-term corrective maintenance. The following activities are included in Kentucky Power's VM Plan: (1) tree pruning and removal, (2) manual, mechanical and chemical control of vegetation along right-of-ways, (3) pre and post inspections of required work, (4) tree replacement program, (5) public education, and (6) tree inventories, work management system and computerized functions.

The VM Plan was developed by Kentucky Power Forestry personnel by evaluating circuit reliability performance, maintenance histories, field analysis of Right-Of-Way (ROW) conditions, customer feedback, and input from field personnel. Local operations and engineering personnel were also consulted for their knowledge of circuit design, field observations, circuit performance, and local community issues.

The VM Plan is intended to be flexible and can be modified throughout the year to adapt to changing environmental conditions and any developing vegetation-related reliability issues.

1. Right-of-way clearing cycle

Kentucky Power Forestry utilizes a "Performance Based" approach to allocate resources for maintenance work. Tree-caused interruption information is used to determine the optimum timing for tree work on a circuit and/or line segment. This allows for resources to be allocated where they can produce the most benefit, rather than following a prescribed rotation. Kentucky Power believes that a

¹ Adm. Case No. 2006-00494, An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices, final Order dated October 26, 2007.

performance based vegetation management approach is more cost-efficient, effective, and flexible.

Kentucky Power performs maintenance on 20 – 25% of its overhead line miles each year. This represents an average 4 to 5 year cycle. This is not a conventional “cycle trim”, however. Due to the different characteristics in terrain, accessibility, and yard tree concentration, some circuits in urban settings typically require shorter maintenance cycles. Rural circuits, where herbicides techniques can be utilized, can be effectively managed with longer maintenance cycles.

Tree-Related Outage data identifies the circuits and/or line segments for resource allocation. The “Cut” portion of the VM Plan may involve complete circuit trimming or partial circuit trimming. The helicopter aerial saw will also be utilized in rural, mountainous terrain to reduce trimming costs and improve reliability. The “Cut” portion of the VM Plan also includes a three-year cycle reclearing of 667 miles of Station Zones to minimize Feeder Breaker interruptions. Resources have also been allocated to allow us to respond to reactive reliability issues. This unscheduled work is categorized as either Hotspot or Quality of Service (QOS) trimming and represents about eight per cent of the Forestry Budget.

Brush conditions are evaluated by Field personnel to determine the most cost-effective herbicide treatment. Kentucky Power plans to use ULV (Ultra Low Volume), High Volume, basal, and aerial spray applications to treat over 1,900 acres of brush. The Spray Program is a crucial component of the Vegetation Management Plan. It allows Kentucky Power to maintain brush in a highly cost-effective manner and greatly reduce future work loads and maintenance costs.

Right-of-Way widening will be performed on selected lines that are located in inaccessible areas, exhibit poor reliability, and/or affect critical or large numbers of customers. This will be funded under the Forestry Capital component of the VM Plan. Other proactive work activities to be employed are TGRs (Tree Growth Regulators), designed to slow regrowth on selected trimmed trees, and a TRIP (Tree Replacement Incentive Program), that provides an incentive for the property owner to allow us to remove selected “cycle-buster” trees.

2. Reliability criteria and reliability reports used to develop and monitor effectiveness of the VM Plan

Tree-Related Outages (Tree In ROW and Tree Out of ROW) data are used to prioritize relative circuit performance. The number of Tree Outages and Customer Minutes of Interruption are measured for each circuit and are normalized on a “per Mile” basis. This interpretation indicates the circuits where resource allocation will have the greatest impact for improving reliability. Repeat Tree-Related Outage information identifies specific line segments that may require

corrective maintenance. These line segments are inspected and evaluated by forestry personnel for possible inclusion into the VM Plan.

The effectiveness of a VM Plan often takes over three years to make manifest. Tree-related outage SAIFI and SAIDI indices are monitored to indicate how the data is trending over a five-year timeframe.

3. How KPCo determines when to perform maintenance

Kentucky Power Forestry utilizes a comprehensive integrated approach to prescribe the most cost-effective maintenance method. Circuit reliability performance, maintenance history, physical inspection of vegetation conditions, Repeat Outage information, and local knowledge of the customer-base are several of the factors used to prescribe maintenance. The prescription will often be a combination of maintenance tools such as: full-circuit reclearing, partial circuit trimming, ground and aerial spraying, aerially sawing, Tree Growth Regulator application, hazard tree abatement, and "cycle buster" tree removal.

4. Evaluation of VM Plan

Tree Outage indices are used to evaluate the long-term (3-years plus) effectiveness of the Forestry Plan. Kentucky Power utilizes a web-based record-keeping program that provides up-to-date information that is used to monitor the tree trimming contractor's production, spending & budget status, and amount of unscheduled hotspot and Quality of Service trimming that is occurring.

Public Communication and Public Education

Kentucky Power Company provides notification to property owners or occupants that may be affected by planned vegetation management activities by making personal contact or by leaving door hangers. The work planners making the door-to-door visits discuss the required vegetation management activities. They also inform the customer about trees that are compatible with overhead lines, tree planting tips, power line identification and associated safety hazards, and our Tree Replacement Program. Pamphlets are available upon request.

2008 KENTUCKY POWER DISTRIBUTION VEGETATION MANAGEMENT PLAN Recap

AREA	PLANNED CUT MILES	PLANNED AERIAL SAW MILES	PLANNED SPRAY MILES	PLANNED SPRAY ACRES	FORESTRY CAPITAL FUNDING	UNSCHEDULED REACTIVE O&M FUNDING	SCHEDULED O&M FUNDING	TOTAL O&M FUNDING
HAZARD	273	27	339	1115	\$ 907,225	\$ 221,500	\$ 2,292,625	\$ 2,514,125
PIKEVILLE	413	27	253	625	\$ 979,093	\$ 426,975	\$ 2,533,630	\$ 2,960,605
ASHLAND	311	15	75	241	\$ 794,117	\$ 150,000	\$ 1,970,606	\$ 2,120,606
TOTALS	997	69	667	1981	\$ 2,680,435	\$ 798,475	\$ 6,796,861	\$ 7,595,336

Attachment E

Ky. Power's Outages and Customers per County

Ky. Power Counties Per Ops. Ctr.

	Max Out Dec. 09 Snow Storm (Outage Rpts)	Max Out Dec. 09 Snow Storm Ky. Power Rpt.	Customers Per County	%
Ashland Ops. Ctr.				
Boyd	1487	2526	24957	10.1
Greenup	215	51	15216	1.4
Carter	2133	540	8892	23.9
Lawrence	3927	3632	7972	49.3
Lewis	1	0	253	0.3
Elliott	2	2	23	8.7
Rowan	66	0	1149	5.7
Hazard Ops. Ctr.				
Leslie	4873	5539	6004	81.2
Breathitt	3429	3429	5550	61.8
Letcher	8699	8596	12170	71.5
Owsley	13	13	13	100
Perry	7393	,065	15915	46.5
Clay	0	30	30	100
Knott	6699	6961	8466	82.2
Pikeville Ops. Ctr.				
Floyd	6971	5340	16295	42.8
Johnson	2425	2001	7471	32.5
Magoffin	852	652	3136	27.2
Martin	2133	2062	5245	40.7
Morgan	4	24	1318	1.8
Pike	26630	26612	35173	75.7
Total:	77952	75075	175249	44.5

Attachment F

Ky. Power Outage Timeline

Ky. Power (December 2009 Snow Storm)

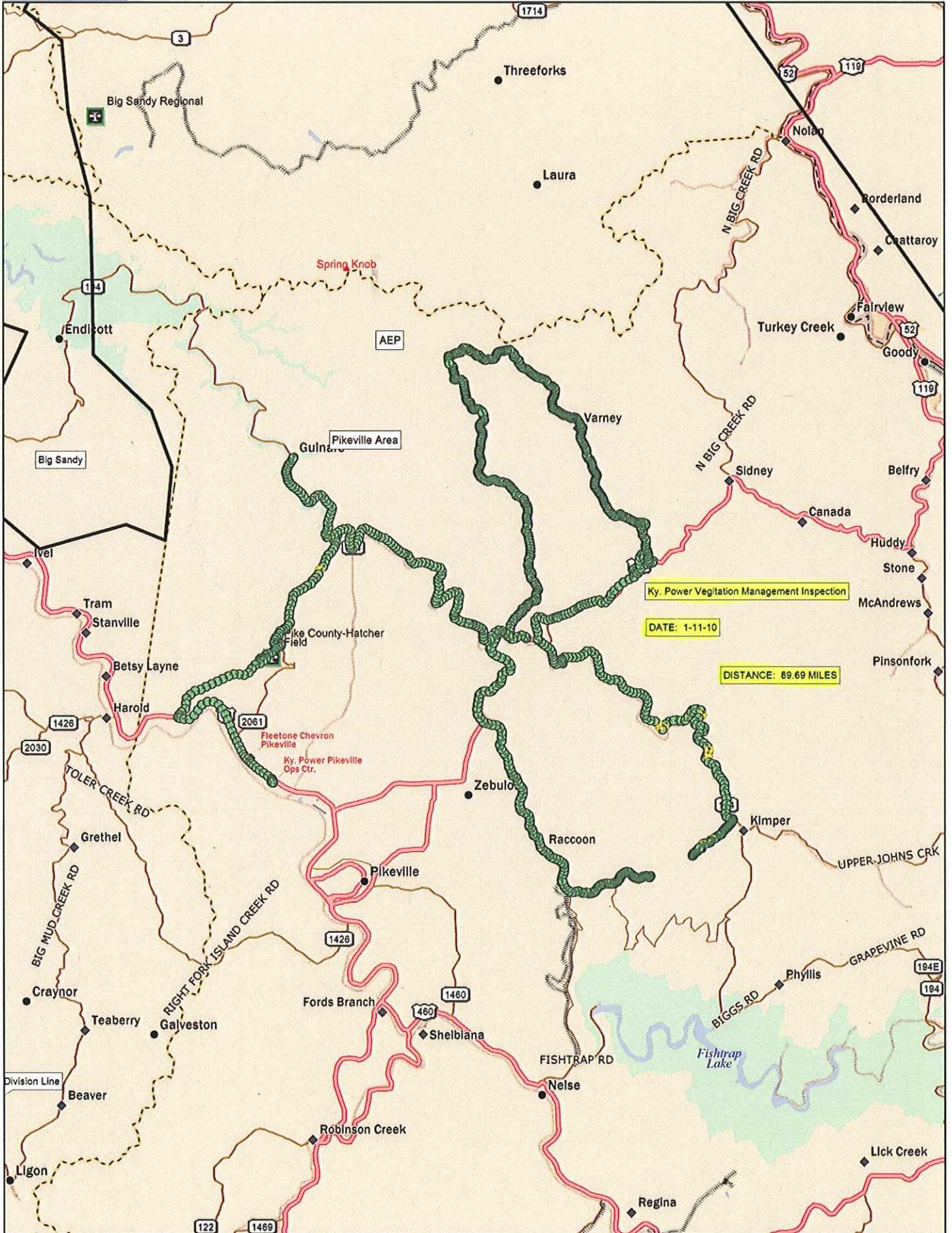
TIME LINE

Outages by Date:	Customers Off
6PM 12-18-09	13,000
11:30AM 12-19-09	70,000
12Noon 12-19-09	80,000
8:30AM 12-20-09	68,000
11:00AM 12-21-09	55,000
11:00Am 12-22-09	43,000
6:30AM 12-23-09	35,000
7:45AM 12-24-09	22,000
7:20AM 12-25-09	14,000
7:45AM12-26-09	7,000
2:30PM 12-27-092	2,500
2:30PM 12-28-09	1,035
8:00PM 12-29-09	All On

204 Broken Poles
385 Broken X Arms
153 Transformers
4,0743 Wire Spans

Attachment G

KPSC Maps of Viewed Area



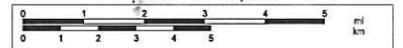
Data use subject to license.

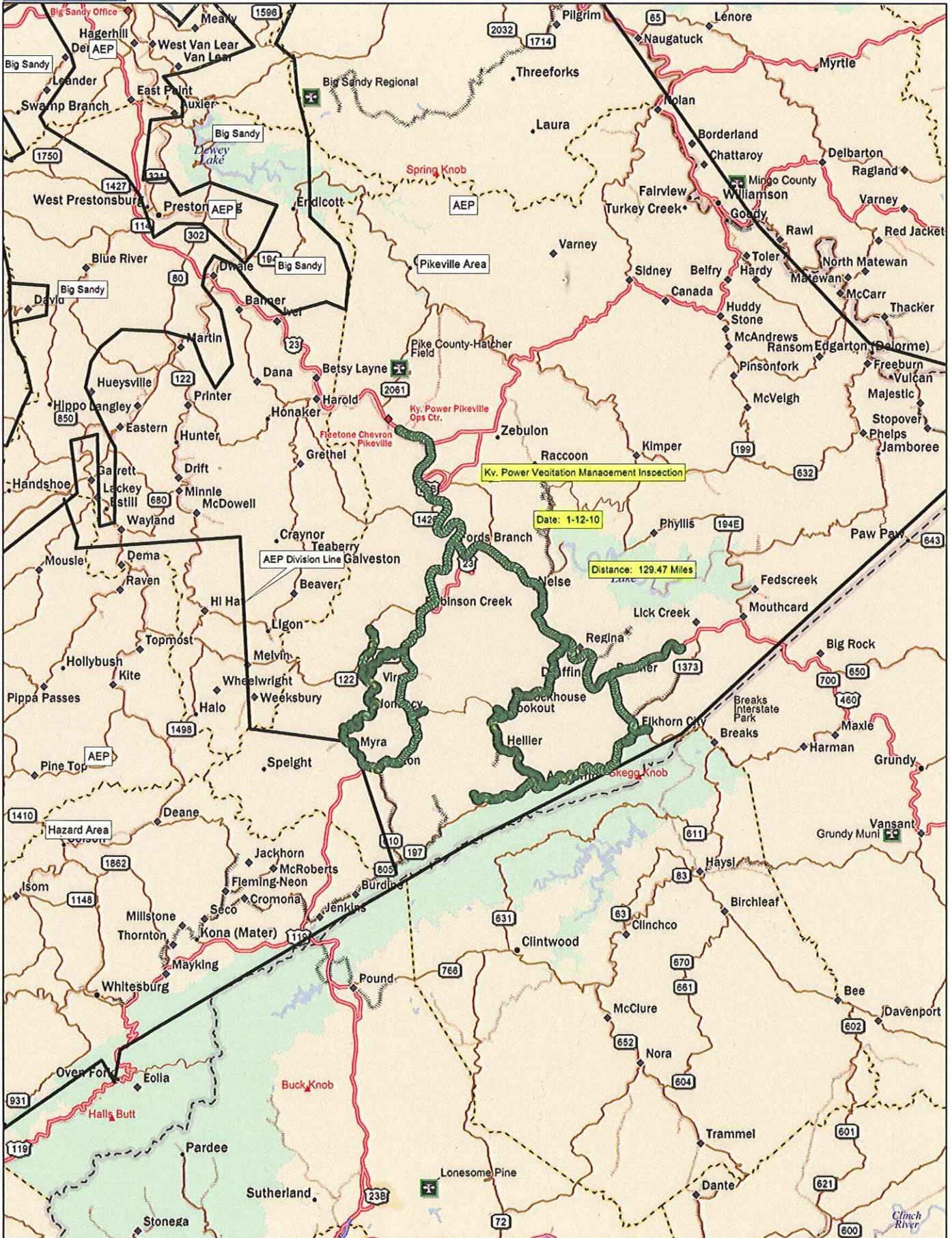
© DeLorme. DeLorme Street Atlas USA® 2010.

www.delorme.com



Scale 1 : 200,000





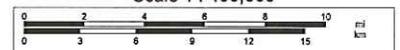
Data use subject to license.

© DeLorme. DeLorme Street Atlas USA® 2010.

www.delorme.com



Scale 1 : 400,000



1" = 6.31 mi

Data Zoom 9-0

Attachment H

Ky. Power's 2008 Reliability Report

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	Kentucky Power Company
REPORT PREPARED BY	1.2	Everett G. Phillips
E-MAIL ADDRESS OF PREPARER	1.3	egphillips@aep.com
PHONE NUMBER OF PREPARER	1.4	606-929-1463

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	2008
-------------------------	-----	------

SECTION 3: MAJOR EVENT DAYS

T_{MED}	3.1	26.306
FIRST DATE USED TO DETERMINE T_{MED}	3.2	1/1/2003
LAST DATE USED TO DETERMINE T_{MED}	3.3	12/31/2007
NUMBER OF MED IN REPORT YEAR	3.4	1

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 RESULTS

Excluding MED

SAIDI	4.1	496.3
SAIFI	4.2	2.904
CAIDI	4.3	170.9

Including MED (Optional)

SAIDI	4.4	531.2
SAIFI	4.5	2.991
CAIDI	4.6	177.6

RECEIVED

APR 01 2009

PUBLIC SERVICE
COMMISSION

Notes:

- 1) All duration indices (SAIDI, CAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of April of each year
- 3) Reports cover the calendar year ending in the December before the reports are due.
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, CAIDI, and T_{MED}

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 5: OUTAGE CAUSE CATEGORIES

Excluding MED

CAUSE CODE DESCRIPTION	SAIDI VALUE	CAUSE CODE DESCRIPTION	SAIFI VALUE
Veg Outside R/W 5.1.1	177.2	Veg Outside R/W 5.2.1	0.741
Equipment Failure 5.1.2	90.5	Equipment Failure 5.2.2	0.627
Veg Inside R/W 5.1.3	74.6	Veg Inside R/W 5.2.3	0.383
Station - Distribution 5.1.4	28.3	Scheduled 5.2.4	0.261
Scheduled 5.1.5	26.2	Station - Distribution 5.2.5	0.241
Vehicle Accident 5.1.6	22.4	Transmission 5.2.6	0.139
Transmission 5.1.7	19.0	Vehicle Accident 5.2.7	0.109
Weather - Unknown 5.1.8	15.8	Weather - Unknown 5.2.8	0.089
Unknown (Non-Weather) 5.1.9	7.7	Unknown (Non-Weather) 5.2.9	0.065
High Winds 5.1.10	7.1	Vandalism 5.2.10	0.046

SECTION 6: WORST PERFORMING CIRCUITS

CIRCUIT IDENTIFIER	SAIDI VALUE	MAJOR OUTAGE CATEGORY
3404002	6.1.1 3603.3	Weather - Lightning
3307302	6.1.2 2286.2	Tree Out of ROW
3000601	6.1.3 2099.4	Scheduled - Company
3310501	6.1.4 2016.4	Tree Out of ROW
3308603	6.1.5 1693.1	Tree Out of ROW
3309901	6.1.6 1620.1	Weather - Unknown
3309001	6.1.7 1509.4	Tree Out of ROW
3411801	6.1.8 1420.9	Weather - Unknown
3007904	6.1.9 1230.6	Tree Out of ROW
3303903	6.1.10 1225.6	Tree Out of ROW

CIRCUIT IDENTIFIER	SAIFI VALUE	MAJOR OUTAGE CATEGORY
3310501	6.2.1 9.615	Tree Out of ROW
3411801	6.2.2 8.944	Equipment Failure
3413402	6.2.3 7.827	Weather - Lightning
3411802	6.2.4 7.482	Equipment Failure
3311103	6.2.5 7.312	Vandalism
3307302	6.2.8 6.827	Tree Out of ROW
3202202	6.2.6 6.686	Equipment Failure
3201001	6.2.7 6.643	Scheduled - Company
3000601	6.2.9 6.533	Scheduled - Company
3404002	6.2.10 6.300	Tree Out of ROW

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

See attachments:

- VM Plan Update - April 1, 2009
- 2008 VM Plan Summary
- 2009 VM Plan Summary

SECTION 8: UTILITY COMMENTS

System Reliability results for each of the past 5 years is attached separately:
System Reliability Summary - Kentucky Power - 2009

Worst Performing Circuit (WPC) analysis and plans are attached separately:
KPCo WPC Analysis and Plans - Ashland District for 2008
KPCo WPC Analysis and Plans - Hazard District for 2008
KPCo WPC Analysis and Plans - Pikeville District for 2008

Kentucky Power Company

Vegetation Management Plan Update

April 1, 2009

Kentucky Power Company manages vegetation along approximately 9,700 miles of distribution line within its service territory. Kentucky Power's distribution Vegetation Management Plan (VM Plan) integrates a blend of work methods to achieve long-term goals and address short-term corrective maintenance. The following activities are included in Kentucky Power's VM Plan: (1) tree pruning and removal, (2) manual, mechanical and chemical control of vegetation along right-of-ways, (3) pre and post inspections of required work, (4) tree replacement program, (5) public education, and (6) tree inventories, work management system and computerized functions.

The VM Plan is developed by Kentucky Power Forestry personnel by evaluating circuit reliability performance, maintenance histories, field analysis of Right-Of-Way (ROW) conditions, customer feedback, and input from field personnel. Local operations and engineering personnel are also consulted for their knowledge of circuit design, field observations, circuit performance, and local community issues. The VM Plan is intended to be flexible and can be modified throughout the year to adapt to changing environmental conditions and any developing vegetation-related reliability issues.

The 2008 Kentucky Power distribution VM Plan was implemented as planned without any major changes. However in 2008, the Eastern Kentucky weather patterns returned to more normal conditions following very dry and calm conditions in 2007. This resulted in increased tree growth rates for the year. We also experienced a great increase in the number of wind storms. With the increase in the vegetation volume and an increased amount of time devoted to service restoration activities, we did not achieve our targets for miles of line maintained and for total expenditures for the year. Maintenance was performed on 1,393 miles of line which was 80.4% of the goal. Our total expenditures for the 2008 program were 95.9% of the budgeted amount.

For 2009, there are no major changes in the activities and processes utilized in Kentucky Power's distribution VM Plan, which calls for maintaining 1,229 miles of line at a total expenditure of \$9,676,000.

(See attached summary tables for 2008 and 2009 numbers.)

2008 KENTUCKY POWER VEGETATION MANAGEMENT PLAN SUMMARY

AREA	PLANNED CUT MILES	ACTUAL CUT MILES	PLANNED AERIAL SAW MILES	ACTUAL AERIAL SAW MILES	PLANNED SPRAY MILES	ACTUAL SPRAY MILES	PLANNED SPRAY ACRES	ACTUAL SPRAY ACRES
HAZARD	273	437	27	16	339	339	1115	1115
PIKEVILLE	413	204	27	7	253	125	625	779
ASHLAND	311	126	15	31	75	108	241	326
TOTALS	997	767	69	54	667	572	1981	2220

AREA	FORESTRY CAPITAL FUNDING	FORESTRY CAPITAL EXPENDITURES	UNSCHEDULED REACTIVE O&M FUNDING	UNSCHEDULED REACTIVE O&M EXPENDITURES	SCHEDULED O&M FUNDING	SCHEDULED O&M EXPENDITURES	TOTAL O&M FUNDING	TOTAL O&M EXPENDITURES
HAZARD	\$ 907,225		\$ 221,500	\$ 165,921	\$ 2,292,625		\$ 2,514,125	
PIKEVILLE	\$ 979,093		\$ 426,975	\$ 152,384	\$ 2,533,630		\$ 2,960,605	
ASHLAND	\$ 794,117		\$ 150,000	\$ 293,076	\$ 1,970,606		\$ 2,120,606	
TOTALS	\$ 2,680,435	\$ 2,618,698	\$ 798,475	\$ 611,381	\$ 6,795,861	\$ 6,620,518	\$ 7,595,336	\$ 7,231,899

2009 KENTUCKY POWER DISTRIBUTION VEGETATION MANAGEMENT PLAN

AREA	PLANNED MILES	PLANNED SPRAY ACRES	UNSCHEDULED REACTIVE O&M FUNDING	SCHEDULED O&M FUNDING	TOTAL O&M FUNDING	FORESTRY CAPITAL FUNDING	TOTAL VMP FUNDING
HAZARD	484	863	\$ 191,947	\$ 2,139,834	\$ 2,331,781	\$ 891,407	\$ 3,223,188
PIKEVILLE	408	621	\$ 320,400	\$ 2,327,192	\$ 2,647,592	\$ 1,012,136	\$ 3,659,728
ASHLAND	337	493	\$ 150,000	\$ 1,870,627	\$ 2,020,627	\$ 772,457	\$ 2,793,084
TOTALS	1229	1977	\$ 662,347	\$ 6,337,653	\$ 7,000,000	\$ 2,676,000	\$ 9,676,000

Kentucky Power Company

5-Year System Performance

(Excluding Major Events as defined by IEEE Std 1366)

Calendar Year	SAIFI	CAIDI	SAIDI
2004	2.545	204.5	520.5
2005	2.574	159.5	410.4
2006	2.756	182.2	502.1
2007	2.276	146.9	334.2
2008	2.904	170.9	496.3

Kentucky Power Company

2008 WORST PERFORMING CIRCUITS

Analysis of Causes/Corrective Actions

Ashland District

Grahn Station – Pleasant Valley 12kV Circuit (3000601 – SAIDI # 3, SAIFI # 8)

About 60% of the Customers Interrupted (SAIFI) and Customer Minutes Interrupted (SAIDI) can be accounted for by Transmission - Vandalism and Transmission – Scheduled outages. On February 2, 2008 a vandal shot an insulator and conductor down on the 69 kV feeding the station. Crews went to open the 69 kV switch just outside of Grahn Station and found the switch to be defective. In order to get customers back on, loops were cut and customers were restored. The following weekend customers were outaged for the second time to make up loops. On June 14, 2008, loops were cut once again so the switch could be isolated. A new pole and switch were installed. The fourth outage was on July 11 to make up loops on the newly installed switch and pole.

No further action is required.

Busseyville Station – Torchlight 34.5kV Circuit (3007904 – SAIDI # 9)

Over 75% of the total Customer Minutes Interrupted were due to Tree Out of ROW and Vehicle Accident (Non-AEP). On August 11, 2008 a truck with its bed raised traveling along US 23 caught a telephone cable and broke 4 or 5 poles. This one episode caused approximately 35% of the total CMI for the entire year. Another 40% of the total Customer Minutes Interrupted was due to numerous Tree Out of ROW outages. Several areas have been targeted and dead pines have been removed over the past year. Along SR 581, eight to ten spans are in the process of being relocated to avoid further tree related issues. We will continue to review outage data and act accordingly.

Kentucky Power Company

2008 WORST PERFORMING CIRCUITS

Analysis of Causes/Corrective Actions

Hazard District

Haddix Station – Quicksand 34.5kV Circuit (3310501 – SAIFI #1, SAIDI #4)

This circuit has been at or near the top of our worst performing circuit list for several years. Last year's list had this circuit ranked at SAIFI#9 and SAIDI #10, so in spite of continued efforts to improve the reliability performance, the Haddix Quicksand Circuit indices worsened.

SAIFI 2007 vs. 2008 was 5.488 and 9.615 respectively and SAIDI 2007 vs. 2008 was 842.9 and 2016.4 respectively. Total customer minutes of interruptions (CMI) for 2007 vs. 2008 were 1,884,737 and 4,504,694 respectively.

Causes

The top four outage causes that contributed to 92% of the total CMI for 2008 were:

Tree out of ROW	=	1,812,937 minutes (40.2% of total CMI)
Equipment Failure	=	1,417,590 minutes (31.5% of total CMI)
Tree in ROW	=	596,333 minutes (13.2% of total CMI)
Scheduled	=	317,051 minutes (7.0% of total CMI)

Because of the size of this circuit (240 line miles – note this was reported as 259 miles in last year's report) and the number of customers served (over 2220) any outage on the feeder breaker of the first zone reclosers will result in a high number of customer minutes of interruption. In fact, during 2008, there were eight outages out of a total of 160 outages that accounted for 63% of the total CMI for the circuit.

These eight outages involved either the feeder breaker or first zone reclosers which affected a large number of customers and also had long durations which directly contributed to the increase in SAIFI and SAIDI. The details of these outages are below:

Date	Cause	Isolating Device	Total Duration (min)	Customers Affected	Total CMI
1/8/2008	Scheduled	Recloser	207	1032	213,624
1/29/2008	Tree in ROW	Feeder	239	2236	534,404
2/6/2008	Tree out ROW	Feeder	316	2236	365,683
6/3/2008	Tree out ROW	Recloser	472	727	266,671
7/9/2008	Tree out ROW	Recloser	660	569	360,381
7/27/2008	Equip (pole)	Recloser	539	1122	524,287
11/4/2008	Equip (pole)	Recloser	505	567	214,824
12/26/2008	Equip (insul)	Feeder	141	2220	313,020

Corrective Actions

After the feeder breaker outages in January and February, the breaker zone right of way was inspected and the width of the right of way was expanded. Also, a pine thicket that was responsible for the Tree in ROW outage was cleared. All circuit breaker zones have been worked to have the rights of way widened in selected areas. This program has been expanded in 2009 to begin similar work in downstream recloser zones that have large numbers of customers.

A detailed pole-by-pole inspection was completed in 2007 and the outage on Jan 8, 2008 was scheduled to make multiple simultaneous repairs to the circuit that could not be performed with the lines energized.

The insulator failure that caused the Dec. 26, 2008 outage belonged to a class of old polymer insulators that are experiencing an increasing number of failures. Over 250 insulators of this type were identified in the inspection and there will be outages scheduled in 2009 to replace the insulators along with other equipment.

It is possible in the future that an additional circuit feeder breaker and exit circuit be constructed so that the Haddix Quicksand Circuit could be divided into two circuits. That way, a feeder outage would affect fewer customers. This will depend on capital funding and priorities.

The concentrated cutout replacement program appears to have been a success, with only 12 cutout related outages that accounted for just 76,043 customer minutes of interruption. Of course, this is dependent on where the failure occurs on the circuit. The replacement program targeted the breaker zone and then the larger recloser protection zones.

Bulan Station – Ajax Dwarf 12kV Circuit (3307302 – SAIDI # 2, SAIFI # 5)

This circuit was not on either the SAIFI or SAIDI list in 2007. The predominant outage causes for this circuit were Tree out of ROW and Weather - High Winds, which accounted for 48.5% and 39% of the total CMI respectively for the circuit during the year. There were a total of 69 sustained outages on the circuit for the year with 28 for Tree out of ROW and only one for Weather - High Winds.

The Bulan Ajax Dwarf Circuit is composed of three main branches that split near the Bulan Station. One branch feeds towards Lost Creek, one branch feeds towards Dwarf and the other branch feeds towards Ajax. Each of these branches is protected by reclosers. The reason for the high SAIFI and SAIDI is that many of the Tree out of ROW outages affected either the feeder breaker or the reclosers protecting these main branches. The one Weather High Winds outage initially affected the feeder breaker.

These outages affected many customers and had long restoration times due to the significant damage caused by the fallen trees which typically break crossarms and poles. The one Weather High Winds outage damage included two broken poles at a mountain top to mountain top highway crossing. Bulldozers were used to access the work site and the poles had to be set manually. This one outage which affected the Lost Creek branch lasted over 44 hours. Many of the long outages caused by trees also affected the Lost Creek branch.

One Tree in ROW outage event on 7/11/2008 accounted for 69.3% of the total CMI for all Tree in ROW outages for the entire circuit. This was a very large pine tree that leaned into the conductors. The property owner would only allow the tree to be trimmed.

Below is a table summarizing the top ten outages on the circuit based on total CMI:

Date	Cause	Isolating Device	Total Duration (min)	Customers Affected	Total CMI
4/11/2008	High Winds	Feeder	2,661	1108	986,463
5/11/2008	Tree Out ROW	Recloser	783	340	248,000
8/27/2008	Tree Out ROW	Feeder	749	1103	216,685
12/10/2008	Tree Out ROW	Recloser	540	345	175,947
12/14/2008	Tree Out ROW	Recloser	457	434	161,486
7/11/2008	Tree In ROW	Recloser	954	358	133,284
6/16/2008	Tree Out ROW	Recloser	429	226	96,954
1/29/2008	Tree Out ROW	Recloser	428	208	89,024
1/30/2008	Tree Out ROW	Switch	644	88	56,672
12/14/2008	Tree Out ROW	Recloser	486	114	55,404

Corrective Actions

The Dwarf branch of the circuit has a circuit tie with the Beckham Hindman 34.5kV Circuit that can be used for partial restoration during outages via a large step-down transformer bank. The Lost Creek and Ajax branches are radial feeds with no circuit ties.

There is a project in progress to provide an alternate feed for the Lost Creek branch of the circuit. The Shamrock Shamrock 34.5kV Circuit crosses the Bulan Ajax Dwarf Circuit near the end of the Lost Creek branch. A step-down transformer bank with reclosers and voltage regulators has been installed to add a 12kV source. The part of the circuit that was involved in the Weather High Wind outage has been relocated to a lower elevation which makes the conductor more accessible and minimizes exposure to higher elevation winds.

In 2009, Vegetation Management has begun ROW reclearing along the Lost Creek and Dwarf branches of the circuit. Additional widening of the existing ROW will be performed in select locations, especially patches of pine trees, in an attempt to reduce the number of tree outages.

Also, relay recalibration will be performed to prevent feeder breaker lock outs for sustained faults beyond the main circuit branch reclosers.

Beckham Station – Hindman 34.5kV Circuit (3308401 – SAIFI # 10)

The Beckham Hindman Circuit is a large circuit with over 180 primary line miles and it serves almost 3500 customers. In the Hazard District, the Beckham Hindman Circuit ranks #1 for customers served and ranks second only to the Haddix Quicksand Circuit in primary line miles.

Because of the circuit's size and number of customers served, any outage involving the circuit feeder breaker or first zone reclosers will affect a large number of customers. The total CMI for this circuit in 2008 was 3,530,073. The three outages causes that contributed most to the total CMI were: Tree out of ROW, Equipment Failure and Scheduled with 1,670,258; 1,382,205; and 212,965 CMI respectively.

There were two outages that involved the feeder breaker. On 1/29/2008, a tree fell from outside the ROW and stripped the conductors from a three phase pole in the breaker zone. Even with partial restoration, this outage lasted for 12 hours and generated 1,175,406 CMI. This one outage accounted for 33.3% of the total CMI for this circuit in 2008. On 12/14/2008, a cutout failed in the breaker zone which resulted in an outage that lasted almost eight hours and generated 796,473 CMI. These two outages accounted for 55.1% of the total CMI for the circuit and a circuit SAIFI of 2.

Below is a table summarizing the top ten outages on the circuit based on total CMI:

Date	Cause	Isolating Device	Total Duration (min)	Customers Affected	Total CMI
1/29/2008	Tree Out of ROW	Feeder	721	3,493	1,175,406
12/14/2008	Equip (Cutout)	Feeder	465	3,487	796,473
3/7/2008	Equip (crossarm)	Recloser	306	1,180	219,561
6/28/2008	Tree Out of ROW	Recloser	276	520	143,520
12/19/2008	Equip (crossarm)	Recloser	176	1183	99,203
11/13/2008	Tree Out of ROW	Recloser	123	583	71,709
12/3/2008	Scheduled	Recloser	496	417	64,474
3/18/2008	Scheduled	Recloser	126	415	52,290
4/8/2008	Scheduled	Recloser	119	415	49,385
6/1/2008	Equip (crossarm)	Recloser	429	292	46,428

Corrective Actions

A large capital improvement project was begun in 2008 to establish the new Soft Shell 138/34.5kV Station. The purpose of this project was to relieve loading on the Beckham Station Transformer and the Beckham Hindman Circuit. Soft Shell Station was placed in service in late Dec. 2008. Over 1000 customers were transferred from the Beckham Hindman Circuit to the Soft Shell Leburn Circuit and over 500 customers were transferred to the Soft Shell Vest Circuit. These customers were transferred along with the associated primary circuits.

With these new circuits in service, the large Beckham Hindman Circuit has been divided into three circuits. Also, the new circuit ties will provide additional opportunities for partial restorations during outages. The smaller circuits should reduce SAIFI and the additional restoration capabilities should reduce CMI which would reduce SAIDI.

The feeder breaker zone will be reviewed by Vegetation Management to determine if there are any opportunities to expand the existing circuit ROW to attempt to reduce Tree out of ROW outages. Because this circuit has been one of the past worst performers, the existing ROW has been a focus of Vegetation Management. Tree in ROW outages contributed only 98,673 CMI or only 2.8% of the total CMI for the circuit in 2008.

The circuit three phase back bone will also be inspected in an attempt to identify any additional crossarms that may fail. The amount of scheduled outages in 2009 will be reduced because all the scheduled outages listed in the table above were required for construction of exit circuits associated with the new Soft Shell Station.

Collier Station – Smoot Creek 34.5kV Circuit (3308603 – SAIDI # 5)

The major outage categories for this circuit are Tree out of ROW, Vehicle Accidents and Equipment Failure with all three of these causes accounting for 92.4% of the total CMI for 2008. Within these three categories, there were five individual outages out of a total of seventy sustained outages that accounted for 82.5% of the total CMI for 2008.

These outages lasted from five hours to almost ten hours because of the extensive damages to the distribution facilities. The Tree out of ROW outages (two total) broke crossarms and poles and the Vehicle Accidents (two total) also included broken poles. The Equipment Failure (one outage) was due to a failure in the load tap changer of the main station power transformer and extensive distribution switching was required to restore service from other distribution sources.

The Collier Smoot Creek Circuit is a radial circuit with little opportunity for partial restoration from other circuits. Below is a table that summarizes each of the five outages:

Date	Cause	Isolating Device	Total Duration (min)	Customers Affected	Total CMI
2/19/2008	Vehicle	Recloser	337	663	211,146
4/12/2008	Tree out ROW	Recloser	587	369	154,139
5/5/2008	Vehicle	Recloser	381	685	260,985
7/31/2008	Tree out ROW	Recloser	485	672	312,920
8/4/2008	Equipment	Station	473	996	435,299

Corrective Actions

The station transformer failure was an unusual event and typically these do result in a long outage. Large coal mining operations curtailed their loads so that the residential customers could be restored from other sources until a mobile transformer was installed. This one outage accounted for 26.1% of the CMI for the year. The response would be similar should a transformer failure occur in the future. The station is equipped with structures in place to facilitate a mobile transformer installation.

To address Tree out of ROW outages, the company has expanded existing ROW where feasible, initially focusing on the feeder breaker zone. In 2009, we plan to address the ROW in the first recloser zones that feed large numbers of customers.

The 2/19/2008 outage was caused by a coal truck that ran off the highway striking and breaking a 60 foot main line pole with a three phase tap and a single phase tap. This outage took a long time to repair.

The 5/5/2008 outage was caused by an excavator that was installing a gas line. The excavator pushed a tree onto a three phase line on a hill side that was inaccessible to construction equipment, which resulted in another long outage.

These types of outages that occurred on the Collier Smoot Creek Circuit are difficult to predict. If not for the above five outages, this circuit would have experienced good reliability during the year.

Slemp Station -- Defeated Creek 34.5kV Circuit (3309901 -- SAIDI # 6)

The reason this circuit made the top ten worst performing circuits for SAIDI was one long outage that occurred on 5/11/2008. A storm with high winds hit the Hazard and Whitesburg Areas that day resulting in many outages. This circuit serves only 38 customer.

The majority of the main feeder consists of about 10 miles of subtransmission line that has been converted to distribution. Much of this line is inaccessible to normal vehicles and must be patrolled by ATV or helicopter. The circuit was patrolled in the afternoon and evening of 5/11/2008, but patrolling was halted due to darkness. The patrol resumed early the next morning and no damage was found and the circuit was restored to service.

This resulted in an outage of nearly 27 hours with 55,941 CMI. The 2008 SAIFI for this circuit including this outage was 2.086. Excluding the 5/11/2008 outage, the SAIFI and SAIDI for this circuit would be reduced to 1.087 and 21.8 respectively which would be superlative reliability performance.

Corrective Actions

The access roads and trails will be mapped so that 4WD and ATV patrols can be expedited. Depending on weather, a helicopter patrol is always an option. In fact, a helicopter patrol was to be arranged on 5/12/2008 if the circuit restoration attempt had been unsuccessful.

Jeff Station – Viper 12kV Circuit (3309001 – SAIDI # 7)

The primary cause for the poor performance of this circuit was one feeder breaker outage on 3/19/2008 caused by a large tree falling from outside the ROW which stripped the primary conductors off of four poles. These poles were located on a steep hillside that was inaccessible to bucket trucks which required all the restoration work to be performed manually. The Jeff Viper Circuit is a radial circuit and the damage was close to the station so that all customers remained out for over 13.5 hours.

Although this outage was classified as Tree out of ROW, this was related to highway construction work that is underway near the feeder circuit. Excavation work near the tree caused it to uproot and fall. Another feeder breaker outage on 6/13/2008 was also related to the highway construction work. A blast was set off near the lines that caused the conductors to wrap together which caused two phase conductors to burn down. That resulted in a 96 minute outage for the entire circuit.

The 2008 SAIFI and SAIDI for this circuit were 5.069 and 1509.36 respectively. With the two feeder outages excluded, the SAIFI and SAIDI would have been 3.058 and 589.6 respectively.

Corrective Actions

After the 3/19/2008 outage, the ROW near the line was inspected and additional trees that could fall into the conductors were removed. Also, the highway construction has progressed to a point that further excavation and blasting will be unlikely to affect the circuit.

Leslie Station – Hals Fork 34.5kV Circuit (3303903 – SAIDI # 10)

This circuit is a fairly large circuit with 74 primary circuit miles that serves over 1100 customers. Within the first few miles from Leslie Station, there are some normally open circuit ties with the Leslie Hyden 34.5kV Circuit; however, once the circuit passes through the City of Hyden, the circuit is entirely radial past the first circuit recloser.

The three major outage categories for this circuit were Tree out of ROW, Equipment Failure and Scheduled. In 2008, this circuit had a total of 60 outages that generated a total of 1,366,509 CMI. There were 12 Tree out of ROW outages that accounted for 631,240 CMI or 46.2% of the circuit total CMI. There were 10 Equipment Failure outages that accounted for 332,621 CMI or 24.3% of the circuit total CMI. There were 10 Scheduled outages that accounted for 249,180 CMI or 18.2% of the circuit total CMI.

On 5/20/2008 a large tree fell from outside the ROW onto the line and knocked down four spans of three phase line. This initially interrupted 776 customers of which 163 were restored after 217 minutes. The remaining 613 customers were restored after repairs were completed about six hours later. This one outage generated 380,490 CMI or 27.8% of the total CMI for the circuit.

The long outage on 1/24/2008 was caused when a 500kVA step-down transformer failed during single digit temperatures. The transformer was replaced which also failed due to load. Two 500kVA transformers connected in parallel were required to pick up the load.

The long outages on 6/26/2008 and 1/29/2008 both occurred late at night in remote mountainous terrain. Crews worked through the night to restore service.

Below is a table that shows the largest outages for the circuit during 2008 based on total CMI. These outages account for 86.2% of the total CMI and 70.4% of the annual SAIFI:

Date	Cause	Isolating Device	Total Duration (min)	Customers Affected	Total CMI
5/20/2008	Tree Out of ROW	Recloser	563	776	380,490
6/4/2008	Scheduled	Recloser	308	615	189,420
1/24/2008	Equip (Step-down)	Fuse	980	161	147,604
12/16/2008	Tree Out of ROW	Recloser	312	388	121,056
4/28/2008	Equip (crossarm)	Recloser	154	778	106,562
6/26/2008	Tree Out of ROW	Fuse	885	133	99,885
4/16/2008	Scheduled	Recloser	61	785	47,885
5/9/2008	Equip (cutout)	Recloser	156	603	42,594
1/29/2008	Tree In ROW	Recloser	617	69	42,573

Corrective Actions

The Leslie Hals Fork Circuit has been on the Hazard District worst performing circuit in the past. As such, a detailed inspection was conducted and circuit performance was analyzed to develop a multi-year plan to improve the circuit reliability.

The entire circuit ROW, including side taps was recleared. This effort has been a success because there were only 13 outages caused by Tree in ROW during the year which accounted for only 93,484 CMI or only 6.8% of the total CMI for the circuit.

The main feeder extending from the first circuit recloser was old #4 CU conductor on old poles and crossarms that had reached the end of their operational life. A capital improvement project was funded to completely rebuild several miles of this line with new #4/OAA conductor, poles and crossarms.

Both of the scheduled outages in the table above were required to transfer conductors during construction for the new lines.

The existing ROW was widened in selected areas as part of the capital improvement project as an attempt to minimize outages caused by trees falling into the lines from outside the ROW.

Kentucky Power Company

2008 WORST PERFORMING CIRCUITS

Analysis of Causes/Corrective Actions

Pikeville District

Johns Creek Station – Meta 34.5kV Circuit (3411801 – SAIFI # 2, SAIDI # 8)

Trees inside ROW caused 34% of the outages during 2008 for this circuit. Right of Way was checked and hotspot reclearing done in the 3rd zone during 2007. Additional ROW work has been planned for 2009 in two zones affecting 500 customers or more. Another 21% of the total outages are due to equipment failure. Fuse cutout failures and transformer failures account for half of these cases. This circuit will be investigated using the ICOM noise detection equipment and infrared/thermal imaging to try to pinpoint possible hardware problems through the second protection zone of the circuit. This circuit was targeted in recent years for cutout replacement and many have already been done. Two outages happened while Transmission had a mobile transformer in service inside the station during work to pinpoint a possible relay problem. That problem was corrected and the mobile transformer taken out of service. These two outages also affected the Raccoon circuit of Johns Creek Station.

Johns Creek Station-Raccoon 34.5kV Circuit (3411802 – SAIFI # 4)

Trees inside and outside ROW caused the majority of outages on this circuit (36% of the total). ROW within protection zones affecting 500 or more customers will be worked in 2009 to eliminate danger trees. This work will cover all of the circuit's main line. Equipment failure was next with 24% of the total. These included fuse cutouts, transformers and arrestors. This circuit will also be checked with the ICOM equipment to locate possible hardware problems. Action on this circuit has also included reclearing and hotspot work by the Forestry group over the past several years.

Lovely Station – Wolf Creek 34.5kV Circuit (3202202 – SAIFI # 6)

Trees inside and outside of ROW comprised 34% of the outages for this circuit. We have made use of scheduled outages on this circuit in 2008 to clear danger trees from the mainline. Ground spray was done on parts of this circuit in 2008. Equipment failure in the form of fuse cutout failures account for 12% of the outages. Insulators and transformers make up another 8% of the total. During 2009, this circuit will also be patrolled with the ICOM equipment to locate possible hardware failure sites. A fuse cutout replacement program will be started during 2009 on this circuit. A tie-line between this circuit and the Dewey-Inez circuit will be proposed as a way to reduce outage time for customers when an outage does happen. Initially this tie will be manually operated but later it could be incorporated into the Dewey-Inez automation system.

Garrett Station – Lackey 12kV Circuit (3413402 – SAIFI # 3)

Trees out of ROW make up 30% of the total outages here. This circuit was cleared in the past 3 years and hotspot work continues as needed. Equipment failure is the cause for 24% of the outages with almost half of that due to fuse cutout failures. This is another circuit that is a candidate for investigation with the noise detection equipment to look for future hardware failure locations. We do have work planned for fuse cutout replacement of known problem cutouts on this circuit for 2009. Weather, including two Transmission system outages due to lightning, made up 16 % of the outage causes. These same two outages affected Spring Fork Station.

Spring Fork Station – One Phase 12kV Circuit (3404002 – SAIDI # 1, SAIFI # 9)

Trees out of right of way and lightning were major causes for this circuit in 2008. This area was patrolled in 2008 to look for danger trees, hotspots, and defective hardware. *The problem areas that were found were corrected on scheduled outages during the year and accounted for 14% of the 2008 total number.* Another 14% of the total comes from aerial saw reclearing when the helicopter struck the primary conductor causing an outage. The small number of customers and remote location make it difficult to work when it comes to outages. It takes a servicer at least one hour of travel to get to it when there is an outage. If a crew is required to make repairs then additional outage time occurs as the crew is dispatched and travels to the site. This lengthens the outage duration for these customers.

Tom Watkins Station – Distribution 12kV Circuit (3201001 – SAIFI # 7)

This circuit was recleared in 2007-2008. Trees out of ROW make up 15% of the total number of outages. We have installed an additional recloser to reduce the station breaker zone exposure. Each major branch of this circuit now has its own protective device. Equipment failure makes up 30% of the total. Items within that category include fuse cutout failure, transformer, lightning arrestor and connector failure. This circuit will also be patrolled in 2009 with the noise detection equipment to look for hardware failure possibilities. Scheduled outages including 2 due to vandalism/copper theft within this station make up another 18% of all outages.

2-2005 KPSC Inspection Reports citing Vegetation Management Violations

Ernie Fletcher
Governor



Mark David Goss
Chairman

LaJuana S. Wilcher, Secretary
Environmental and Public
Protection Cabinet

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

Gregory Coker
Commissioner

Christopher L. Lilly
Commissioner
Department of Public Protection

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 – Pikeville Operations Center

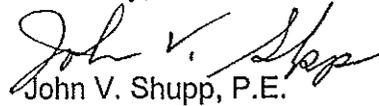
Dear Mr. Wagner:

On July 26-28, 2005, Mr. Steve Kingsolver conducted a Routine Field Inspection of Kentucky Power's Pikeville Operations Center in Pikeville, 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, no deficiencies were found.

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. Kingsolver 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:SK:dcp
E:\Inspections\Electric Branch\Kingsolver\KP-072605-P
Attachments

cc: Timothy C. Mosher
President and Chief Operating Officer

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION

UTILITY INSPECTION REPORT

KENTUCKY POWER/AMERICAN ELECTRIC POWER
Pikeville Operations Center

August 3, 2005

Report Number: PSC DTR# KP-072605-P

BRIEF

Inspector: Steve Kingsolver

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: Pikeville 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: 69,955

Area of Operation: Service area encompasses all or part of 9 counties: Pike, Floyd,
Knott, Martin, Johnson, Magoffin, Morgan, Breathitt and Letcher
counties in Eastern Kentucky.

Supply Source: AEP

Distribution Description: Primary Voltages: 7,200/12,470 and 19,900/34,500

Workforce Summary: 38 employees

Utility Representative Involved in Inspection: Tim Hall, Supervisor, Distribution
System

Date of Last Inspection: May and June, 2001

Number of Deficiencies Documented in Last Inspection: 0

Number of Deficiencies Not Cleared from Last Inspection: 0

Summary of items and facilities inspected: 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

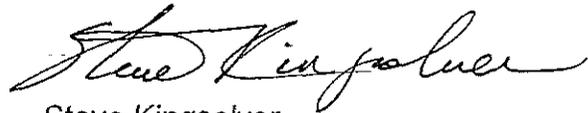
Deficiency No. 1. Maintenance or Continuity of Service. Probable violation of 807 KAR 5:041, Section 5(1).

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 my recommendation that Kentucky Power perform the same level of tree trimming on the entire circuit as they are now doing in the station zone. Station zone is a Kentucky Power term for the section of a circuit from the substation to the first automatic reclosing device on the circuit. It appears that there is not a process in place to insure that all circuits get a timely complete circuit trimming and a lot of effort is now put into hot spotting across the circuits.

Respectfully submitted,



Steve Kingsolver
Electric Utility Investigator
Electric Branch, Division of Engineering

JM:dcp

E:\Inspections\Electric Branch\Kingsolver\KP-072605-P

Attachments

PIKEVILLE OPERATIONS CENTER



7/27/2005 12:56:20 PM

1

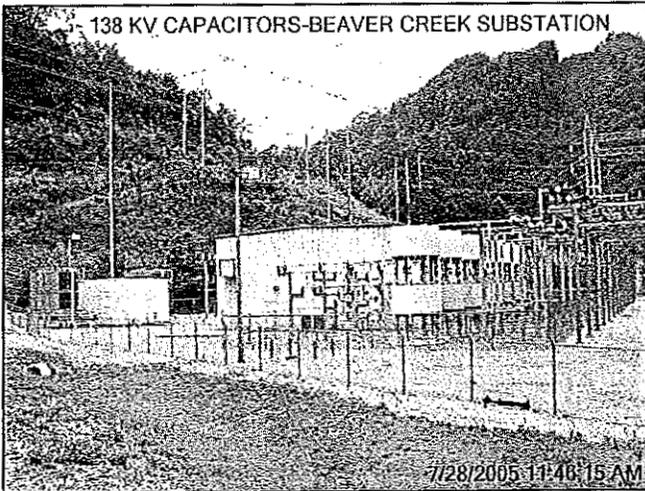
VEHICLE STORAGE BAYS-PIKEVILLE OPS. CENTER



7/27/2005 11:14:57 AM

2

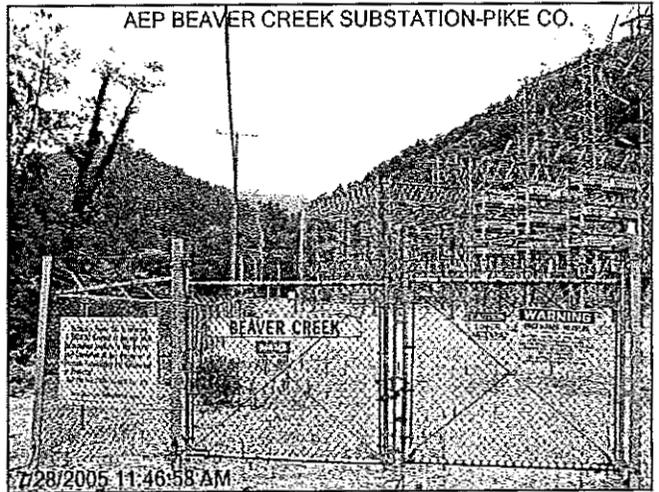
138 KV CAPACITORS-BEAVER CREEK SUBSTATION



7/28/2005 11:46:15 AM

3

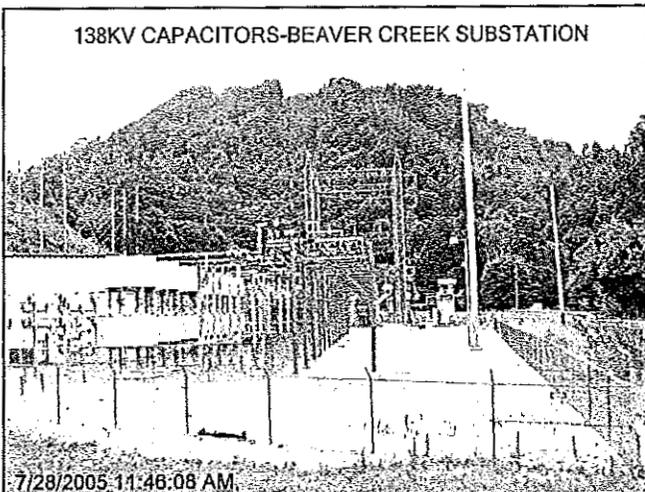
AEP BEAVER CREEK SUBSTATION-PIKE CO.



7/28/2005 11:46:58 AM

4

138KV CAPACITORS-BEAVER CREEK SUBSTATION



7/28/2005 11:46:08 AM

5

VEHICLE STORAGE AREA

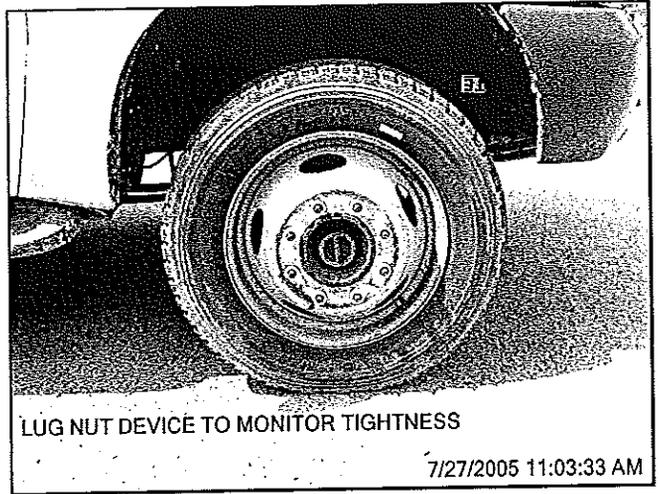


7/27/2005 10:58:21 AM

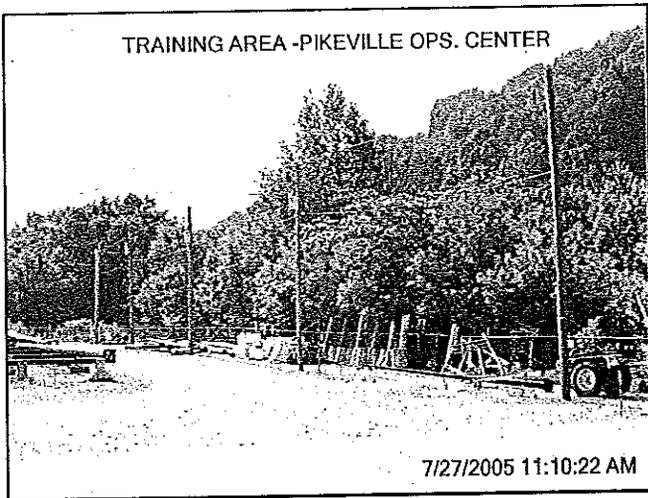
6



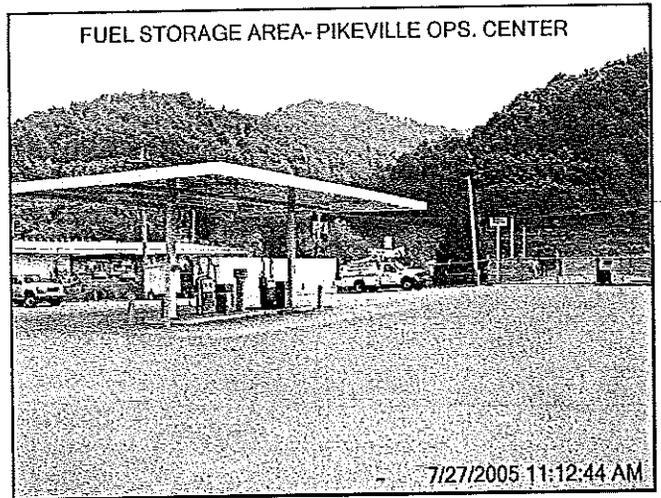
7



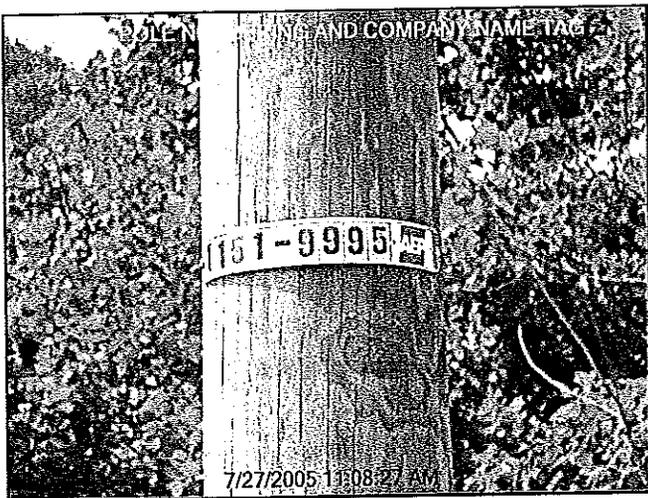
8



9



10



11



12

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.

Deficiency Tracking Report

Deficiency Detail (grey sections filled in by PSC)		
Utility	Date of Investigation	Investigator
Kentucky Power/AEP, Pikeville Operations	7/26-28/2005	Kingsolver
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 at the end of the station zone, the right-of-way clearing is greatly reduced. Hot spotting is the used in the remainder of the circuit.		
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 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:



RECEIVED
SEP 06 2005
PUBLIC SERVICE
COMMISSION

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-P
Kentucky Power Company - Pikeville Operations Center

Dear Mr. Shupp:

The Inspection Report for the Pikeville area 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 it 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 than being deployed today. Second, in 2006 the Company will begin the transition to a vegetation maintenance

Mr. John V. Shupp
September 6, 2005
Page 3

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,

A handwritten signature in cursive script, appearing to read "Errol K. Wagner".

Errol K. Wagner
Director Regulatory Service

Ernie Fletcher
Governor

LaJuana S. Wilcher, Secretary
Environmental and Public
Protection Cabinet

Christopher L. Lilly
Commissioner
Department of Public Protection



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

Mark David Goss
Chairman

Teresa J. Hill
Vice Chairman

Gregory Coker
Commissioner

November 23, 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 – Ashland Operations Center

Dear Mr. Wagner:

On November 15-17, 2005, Mr. Steve Kingsolver conducted a Routine Field Inspection of Kentucky Power's Ashland Operations Center in Ashland, 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 June 2003. During that inspection, three deficiencies were found, two have been cleared and one has remained outstanding.

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 December 28, 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 me at (502) 564-3940. We appreciate your continued interest in the safe operation of your electric facilities.

Sincerely,

A handwritten signature in black ink that reads "John V. Shupp".

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

JVS:SK:dcp
E:\Inspections\Electric Branch\Kingsolver\KP-111505-A.xls
Attachments

cc: Timothy C. Mosher
President and Chief Operating Officer

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION

PERIODIC REGULATORY COMPLIANCE INSPECTION

KENTUCKY POWER/AMERICAN ELECTRIC POWER
Ashland Operations Center
Ashland, Kentucky

November 23, 2005

Report Number: PSC #KP-111505-A

BRIEF

Inspector: Steve Kingsolver

Date of Inspection: November 15-17, 2005

Type of inspection: Periodic Regulatory Compliance Inspection

Type of Facility: Electrical Distribution Operations Center

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

Location of Facility: Ashland, Kentucky

Purpose of inspection: Periodic inspection of utility facilities and management practices to verify compliance with PSC regulations

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

INSPECTION

Description of utility: Retail Electric Energy Provider

Number of Customers: 58,000

Area of Operation: Serving parts of Boyd, Greenup, Carter, Lawrence, Lewis, Elliott, Martin and Rowan counties.

Supply Source: AEP

Distribution Description: Primary Voltages: 12kV and 34kV

Workforce Summary: Total Employees: 130

Line Work Trained Employees: 33

Utility Representative Involved in Inspection:

Everett Phillips, Operations Manager

Lloyd Rayburn, Supervisor Dist. System

Bob Shurtliff, Safety Coordinator

Joe Pemberton, Engineering

Greg Bell, Engineering

O.C. Leith, Right of Way

Roger Cline, Distribution Services

Mike Williams, Dispatching, Ky. Power

Date of Last Inspection on Record: June, 2003

Number of Deficiencies Documented in Last Inspection on Record: 3

Number of Deficiencies Not Cleared from Last Inspection on Record: 1

Summary of items and facilities inspected: Records at the operations center in this

report were reviewed. This consists of documents on interruptions, system mapping, safety, voltage standards, system inspection, right-of-way maintenance, reporting of accidents and outages along with other topics covered.

An inspection of outside plant was performed with a company employee. This visual inspection consisted of substation and switching station maintenance, storage of material and

equipment, right-of-way maintenance on distribution and transmission circuits.

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.

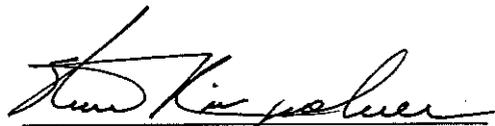
RECOMMENDATIONS:

It is my recommendation that Kentucky Power perform the same level of tree trimming on the entire circuit as they are now doing in the station zone. Station zone is a Kentucky Power term for the section of a circuit from the substation to the first automatic reclosing device on the circuit. It appears that there is not a process in place to insure that all circuits get a timely complete circuit trimming and a lot of effort is now put into hot spotting across the circuits.

ADDITIONAL INSPECTOR COMMENTS

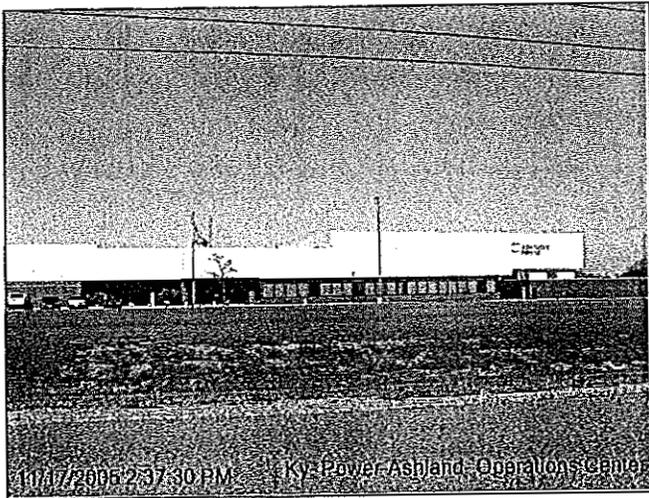
During this periodic regulatory compliance inspection, it was not possible to review every record relating to all Commission requirements. Therefore, in some instances the results contained in this report are indicative of those items inspected and reviewed on a sample basis. This inspection focused on field and operational issues.

Submitted by,

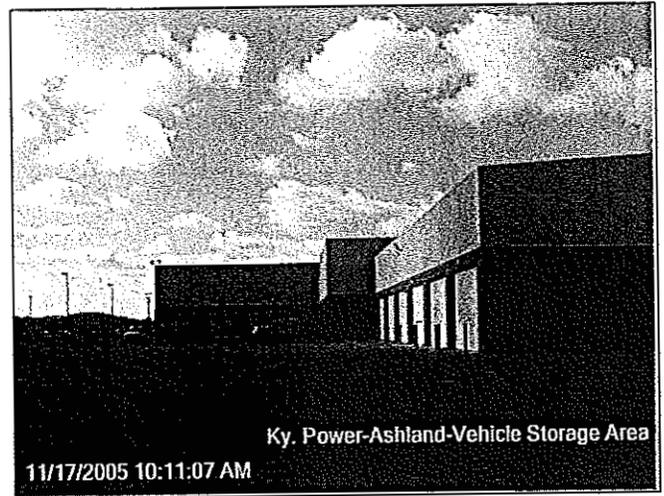


Steve Kingsolver
Electric Utility Investigator
Electric Branch, Division of Engineering

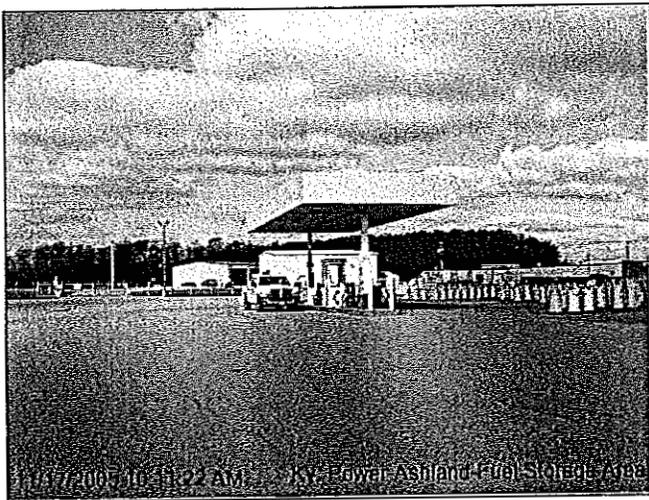
SK:dcp
E:\Inspections\Electric Branch\Kingsolver\KP-111505-A



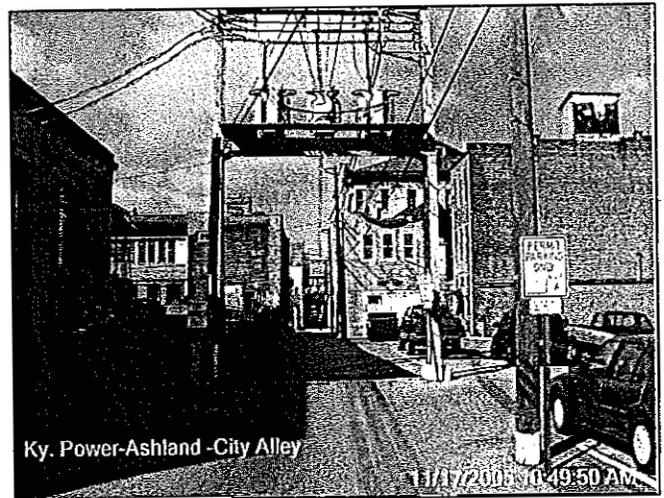
1:



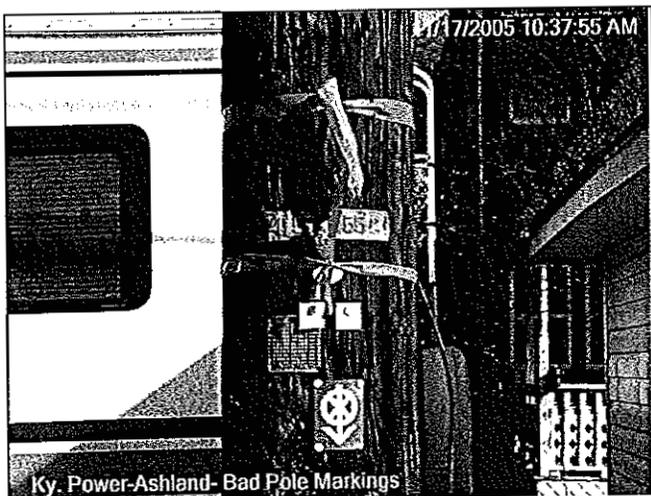
2:



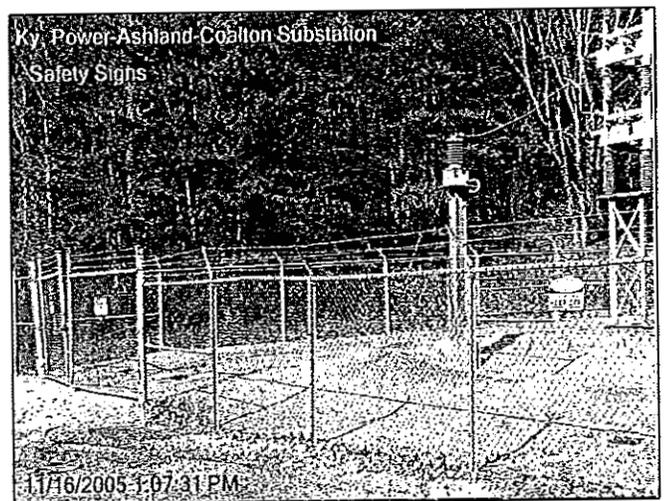
3:



4:



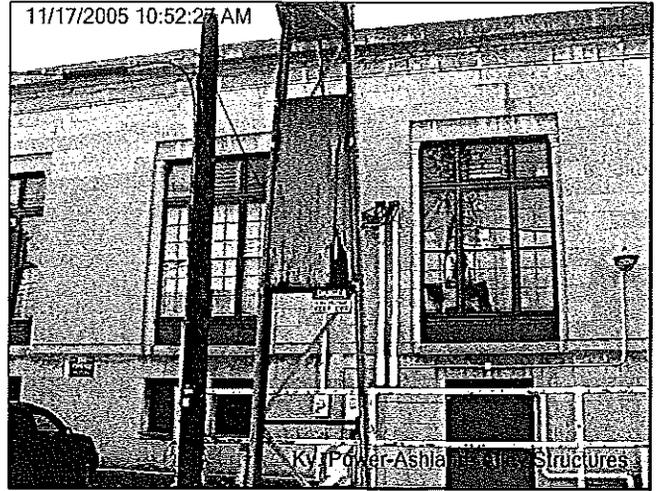
5:



6:



7:



8:

Deficiency Tracking Report

Deficiency Detail (grey sections filled in by PSC)		
Utility	Date of Investigation	Investigator
Kentucky Power/AEP, Ashland Operations	11/15-17/2005	Kingsolver
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 at the end of the station zone, the right-of-way clearing is greatly reduced. Hot spotting is the used in the remainder of the circuit.		
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: _____

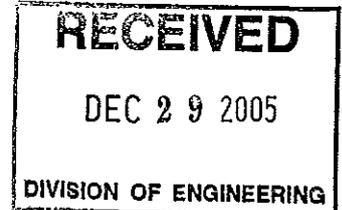


**KENTUCKY
POWER**

A unit of American Electric Power

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

December 28, 2005



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

RE: PSC Utility Inspection Report DTR# KP-111505-A
Kentucky Power Company – Ashland Operations Center

Dear Mr. Shupp:

The Inspection Report for the Ashland area dated November 15-17, 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 “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 it 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.

Mr. John V Shupp
December 28, 2005
Page 2

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 operation 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 effort 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 zone 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.

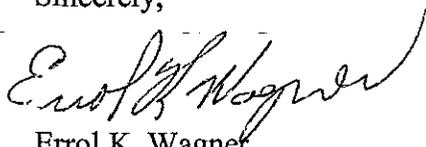
Prior to receipt of the Commission's Inspection Report and as a result of the Company's continuing evaluation process, the Company had postponed the clearing of 28 Station zones and instead devoted personnel and other resources to clearing approximately 76 miles and approximately 50 other sections of the Company's circuits. The person responsible is Everett Phillips, Director of Distribution Operations, 12333 Kevin Avenue, Ashland, KY 41102, Phone 606-929-1463.

Mr. John V. Shupp
December 28, 2005
Page 3

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 customer's growing demands for continued improved reliability, the Company plans to significantly increase resources as proposed in Witness Phillips' direct testimony (Case No. 2005-00341). 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 Phillips. His telephone number is 606-929-1463.

Sincerely,



Errol K. Wagner
Director Regulatory Services

jkt

Attachment J

News Article, Whitesburg Mountain Eagle Paper

WHITESBURG MOUNTAIN EAGLE

Ky. Power officials listen to criticism, talk about outages

By WILLIAM FARLEY

When District Two Magistrate Archie Banks told representatives of Kentucky Power Company, "You're asking us to pay for your mistakes," it summed up the feelings of many of the group of more than 250 people who crowded into the Letcher District Courtroom and adjoining hallway for a meeting called by Commonwealth's Attorney Edison Banks on the subject of Kentucky Power.

Archie Banks's statement was just one of many from elected officials and citizens saying Kentucky Power's negligence in keeping right-of-way cut contributed greatly to the devastating power outages that kept many Letcher County residents in the cold and dark through the Christmas holiday and caused thousands of people to lose the entire contents of refrigerators and freezers. The power company also drew harsh criticism for its proposed 35-percent rate residential rate increase.

Commonwealth's Attorney Banks opened the meeting by telling the audience he called the gathering to examine American Electric Power's poor right-of-way maintenance. AEP, based in Columbus, Ohio, is the parent firm of Kentucky Power. Banks said he did not know about the proposed rate increase at the time he called the meeting. He said his focus was on three issues: How long was the power off, what was the cause, and were there any unusual hardships experienced by residents of the county?

Kentucky Power President Timothy Mosher introduced Darrell Wagner, the company's Director of Service, and Mike Lasslo, who manages Kentucky Power's Hazard operation. Mosher told the crowd the power company officials were there to listen and to attempt to help the public understand why the company has asked the Kentucky Public Service Commission for a rate increase.

Letcher County Judge/Executive Jim Ward told Mosher he had several questions about the duration of the outage and if there would be any possible reimbursement for people who lost everything in their refrigerators and freezers during the outage. Ward asked who would pay for overtime for county workers, many of whom he said worked almost continuously during the outage. He also asked about the food and water handed out by county workers.

"We were out 24/7, the county rangers, rescue squads, and county workers," said Ward. "We kept senior citizens centers open continuously, two with generators and kerosene heaters. The magistrates and I were out continuously. I also want to ask why the rights-of-way haven't been cleaned up. You keep them clean in other places, why not in eastern Kentucky?"

Letcher County Attorney Harold Bolling presented a list of questions and complaints which had come to him from citizens. He said he was particularly concerned about several areas, including the handling of homes without electricity that housed handicapped and seriously ill people, the issue of reimbursement for people who had lost everything, and what procedures Kentucky Power has in play to reimburse them, and the neglect of rights-of-way.

"I've probably had 1,000 calls about these issues," said Bolling. "I understand the difficulty, but for many people, it took very simple things to get their power back. Why were people with special needs not addressed? How will people be compensated? Will they be compensated? A number of citizens have told me they have complained about right-of-way issues near their homes for years. Morgan Reynolds over in Seco, a former South Central Bell employee, said he

has repeatedly requested clearing. These are very common issues. How do you go about deciding which rights-of-way to clear, if you decide? Do you have a plan?"

Bolling said he felt Mosher should publicly acknowledge whether there would be any reimbursement for the people who had lost food and that each person should be allowed to decide the course of action they would take. He said he was particularly anxious to learn if Kentucky Power had a long-range plan to address the rights-of-way to prevent further outages. "People shouldn't have to fight to have electricity," said Bolling. "They pay their bills and they want it. I'm concerned about a long-range plan too. Will you step up to the plate and do the right thing?"

District Five Magistrate Wayne Fleming said he had spoken to a lot of people who lost every electrical appliance they owned because of power surges. He added that workers from Arkansas had told him that the condition of rights-of-way in Letcher County reflected the worst rights-of-way management they had ever seen.

"I want to know how you would have the gall to ask for a rate increase," said Fleming, and then he directed his next question directly to Mosher. "Will you accept a \$1 million bonus this year and put a rate increase on a poor old lady who is barely making it?"

District One Magistrate Bobby Lewis echoed Fleming's question, asking how Kentucky Power will deal with people who are on fixed incomes, many of whom are already having problems paying record high power bills before the rate increase even comes into effect.

"Will you cut their power off?" asked Lewis.

"Sure, yes they will," came a response from the crowd.

Lewis also asked how often rights-of-way are cleared and Magistrate Banks said he had also spoken with workers from Arkansas who told him the maintenance on rights-of-way in Letcher County was ridiculous.

"One man told me he had worked in Arkansas for 30 years and had never seen anything like it," said Archie Banks. "Our local guys work hard. It's not these guys I have a problem with. Our county attorney will look into your business and stock payments, because you're sure not putting it back into the process. You double your bills every December. I just wonder what it will be next month. A 35-percent rate increase is the most ridiculous thing I have ever heard."

District Three Magistrate Codell Gibson expressed concern about the ability of Letcher County residents to handle a 35-percent rate increase.

"Most people can't take a rate increase," said Gibson. "They (Kentucky Power) will cut you off. They don't care if you freeze. They couldn't care less."

Commonwealth's Attorney Banks reminded the audience not to kill the messenger and told them that the session was being recorded and their comments would be played for the Public Service Commission during its deliberations on the rate hike. Then Kentucky Power District Customer Services Manager Mike Lasslo took the floor to explain the situation that occurred during the outage.

"This was the worst outage I've experienced in 32 years," said Lasslo. "It was already very wet, the soil was saturated, and a windstorm one week before had caused a lot of outages. Then a heavy, wet snow broke trees and limbs."

Lasslo told the audience that a lot of lines had been trimmed, and that Kentucky Power spends millions of dollars on rights-of-way management. He added that company workers were also overextended during the outage, often working 16 hours a day. Lasslo said weather forecasts leading up to the Friday snowstorm had not called for so much snow, although others said they had heard forecasts calling for eight to 10 inches. He said that because of the mild forecasts, his office decided not to bring in outside help and was caught unaware. He said the dispatch center in Hazard was opened around 7 p.m. and had work crews out Friday night, but by Saturday the weather was so bad Kentucky Power's own workers were stuck and the company started asking for help.

Lasslo said by then Virginia and other surrounding areas had gotten the nearby work crews, so Kentucky Power had to call for help from Ohio, Mississippi, and Arkansas. He said Letcher County had 8,500 homes without electricity, or 92 percent, Knott County had 82 percent without power and Perry County 45 percent.

"This was a disaster beyond disasters for us," said Lasslo. "We had over 100 broken power poles, 27 in Letcher County."

Lasslo said that usually 64 people work in Whitesburg and Hazard and there are an additional 77 who work for Asplundh, a tree cutting company that contracts with Kentucky Power. Lasslo said he asked for 250 additional workers from other states, but due to the distances they had to travel, most didn't get here until Tuesday. He added that the weight and density of the snow and the "challenging terrain" exacerbated the difficulties of repairing the downed lines.

Lasslo also addressed the rights-of-way issue, telling the audience that Kentucky Power tries to maintain a 40-foot right-of-way, with additional distance on the uphill side. He said the workers began to try to restore power from the power stations out, doing the main branches first. He added that it would be useless to start at farther branches, since they wouldn't be able to get power until the main lines were fixed anyway. Lasslo said it created a bad situation for special needs people in hollows and at the end of branch lines. He added that many of the outside workers said they were outside their comfort zone here due to the terrain.

In response to a question about running power lines underground, Lasslo said it would cost \$64 billion to put all the lines in the United States underground, which would cause an additional \$300 to be added to every bill in the country. He also claimed that many of the trees that had fallen on power lines had come from above right-of-way and slid down the hill.

"They're not our trees," said Lasslo. "Trees cause about half of outages."

A man in the audience then said the contractors hired to clear rights-of-way cut just enough to clear lines without accounting for annual growth. Another asked why not hire local people during good weather to clear the rights-of-way and then sell the trees to local mills, increasing jobs and income. A number of others had complaints about the quality of work from the contractors who cut the trees. One citizen, Vanessa Hall, asked about the discrepancy between home rate increases and industrial rate increases.

Darrell Wagner weighed in for Kentucky Power and said that for years, industrial rates have been higher and have subsidized home rates and kept them lower. This, although for years the state has claimed in industrial recruitment ads that Kentucky's industrial electricity rates are among the lowest in the nation. Wagner said that if the state wants to attract industry, the people would have to bear the brunt of the rate hikes.

Hall told Wagner that she thought the idea didn't make a lot of sense.

"I'm not making a profit in my home," said Hall. "But you want to increase my bill by 35 percent. You are going to raise my rate so you can attract a factory to pay a lower rate, so I'll buy more of that tacky plastic to put on my windows. Who made that decision? Don't pass your mistakes on to me."

Stan Osborne, a member of the Fleming-Neon Volunteer Fire Department and Pine Mountain Search and Rescue, told Wagner that AEP's stock had gone up 13.4 percent over the past year and that AEP has 176,000 customers. Osborne said with that volume of customers, if it just asked for a \$50 increase from each customer, AEP could gain about \$8.8 million per month. He said the proposed 35 percent would garner an additional \$11.8 million a month.

"That's absurd," said Osborne. "When the crap hit the fan, local guys busted their butts. Would this have happened in Frankfort? Hell no. I know we have different terrain. They have difficult terrain in Montana, but they take care of their lines there. If you would spend the money necessary to clear the rights-of-way, why not hire local people to clear them? Put the money back here. I guarantee that we have local people who can clear rights-of-way safely and economically."

Jerry Collins of Millstone then asked County Attorney Bolling if there was any way the citizens of Kentucky could make sure the Public Service Commission actually serves the people. Collins also asked if Kentucky Power could be replaced. Bolling replied that the members of the PSC are political appointees, appointed by the governor, and the power company is a private corporation, although it also has rights as a public utility. He added that AEP is a corporate entity, profit making with a corporate make-up and is run from the top down.

"How can we get rid of them?" asked Collins.

Tim Mosher then weighed in and told Collins that AEP is a regulated monopoly.

"We are in business to provide a return to our investors," said Mosher. "We employ 250 people in Kentucky. Some of the information I will share with you, you won't want to hear. This is being recorded and will be shared with the Public Service Commission. Hearings will be held by the PSC in Frankfort. We sent out 175,000 letters to inform people and we paid the postage."

Mosher then claimed that the outages were caused by an act of God, and an audience member shouted, "Not my God."

"We did not cause the snowstorm," said Mosher. "If it wasn't your God, I don't know who it was. We can't be held responsible for the loss of food and equipment. It was an act of nature. We do have a fund set aside. We spend \$7 million each year clearing rights-of-way. A lot of the problem is not in the rights-of-way, it is trees sliding down the hills."

Mosher said that Kentucky Power keeps records of customers with special needs if it is informed of them. He said the company checks immediately and if it can get in touch with them, it tells them they should leave until they get their electricity back.

Mosher said that the timing of the rate hikes couldn't have been worse. He said rate hikes are based on a "test year," a one-year record, and that timing happened to fall during the time of the outage.

"In September, the return on our investment showed it was time to raise the rates," said Mosher.

"We have to file within 90 days of the test year. So on December 22 we had an ad in the newspapers and sent letters to homes. If you want to throw us out, you can go to the PSC and say you want somebody else."

"You said the power company would not be responsible except for neglect," said Judge/Executive Jim Ward. "In my opinion, you neglected the rights-of-way."

"You have a right to that opinion," said Mosher. "And you have a right to go to the Public Service Commission."

Mosher also told the audience that there are ways to keep costs down by using energy efficient appliances, fluorescent light bulbs, and other energy saving measures. He said that the rate increase would provide extra money to address what he referred to as "vegetation management."

"How do you expect us to pay?" asked Ward.

"You have to use kilowatts as efficiently as you can," replied Mosher. "You can cut utility use by decisions you make. The PSC will examine every dollar. It will all come out in the hearing process."

One audience member asked Ward if LKLP and Letcher County Senior Citizens would provide buses to take interested parties to the PSC hearings. Mosher said the hearings have not been scheduled yet but would probably take place in April. Judge Ward said the county will work on a way to get people to the hearings.

Complaints from the crowd primarily settled on three issues — the duration of the outage, the maintenance of the rights-of-way, including accusations that tree cutters did not do their jobs, and the size of the rate increase. About 50 people addressed the panel from the podium and some told stories of hardship caused by the outage.

Letcher County author Sam Adams told the panel he had to take his mother to Lexington because she is chronically ill and needed to be in a place with electricity for her treatment, only

to have his power restored the next day so he had to go bring her back, forcing her to endure two long trips in two days.

Jerry Collins said a lack of communication had caused a number of problems. He said the telephone lines at AEP were jammed and he couldn't get through for hours, only to get a computerized recording when he did finally make contact. Marie Pratt said she lost the entire contents of her freezer, including her Christmas dinner, and lost several appliances because of the power surges.

Willie Farley of Democrat told Mosher that the rights-of-way where he lives have never been cleared and the "tree people" just sit in their vehicles for eight hours a day for two weeks when they do come.

"You need to clean up Asplundh's act," Farley said in reference to one contractor. "They aren't the only tree company. Somebody dropped the ball. It's a shame you come in here and ask for a 35-percent rate hike and you are in the wrong and you know you're in the wrong."

Derek Cooke, who works as a mine inspector, told the panel that the 35-percent figure was simply a negotiating ploy. He added that if any of the mines he inspected took such poor care of high voltage cables as Kentucky Power does, they would be closed immediately.

"Has anybody ever gotten a 35-percent raise?" asked Cook. "The problem is the lines are still too close to the trees. Negligence is what it was. Nobody cleared the lines. My neighbors and I have had people cut our trees for years because you wouldn't. You can't ask for 35 percent.

Even if we have to take up donations and bake cookies, we'll be at the PSC meeting"

Sergent resident Buddy Sexton added that he had asked for trees on his property to be cut several times only to be told that they could only be trimmed. He also said that many older people in Letcher County are not computer users and are not comfortable talking to a computer. Edison Banks's mother, Sue Banks, said when she finally got to talk to a person at AEP, they didn't even know about the situation.

"I wonder why we don't get respect in eastern Kentucky," said Mrs. Banks. "Why do we always get the short end of the stick? I don't ask anybody to pay my bill, but I lost four containers of insulin. You say it's an act of God, but it had a lot to do with ignorance."