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January 9, 2007

RECEIVED

Ms. Beth O'Donnell, Executive Director  
Public Service Commission of Kentucky  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602

JAN 11 2007  
PUBLIC SERVICE  
COMMISSION

**RE: Administrative Case No. 2006-00494  
An Investigation of the Reliability Measures of Kentucky's Jurisdictional  
Electric Distribution Utilities and Certain Reliability Maintenance Practices**

Ms. O'Donnell:

Please find enclosed the original and seven (7) copies of the information requested in Administrative Case No. 2006-00494: An investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices for South Kentucky Rural Electric Cooperative Corporation.

Carol Wright, Chief Operations Officer, will be our witness for all items of Appendix A.

Should you need additional information concerning this filing, please contact this office.

Sincerely,

A handwritten signature in cursive script that reads 'Allen Anderson'.

Allen Anderson  
President/CEO

JB/cn

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN ADMINISTRATIVE CASE NO. 2006-00494  
Dated December 12, 2006

1. Does utility management measure, monitor, or track distribution reliability?
  - a. If so, describe the measures used and how they are calculated.

**SKRECC uses a computerized Outage Management System (OMS) that monitors distribution system reliability. The OMS keeps track of the pertinent data associated with each outage and keeps this information for future reporting and analysis. This information is used to develop a standard monthly outage report which lists several parameters used to measure and monitor reliability and help determine ways to improve service. The OMS has the ability to archive and help analyze the outage history on individual members. System-wide SAIDI (system average interruption duration index), CAIDI (consumer average interruption duration index), and SAIFI (system average interruption frequency index) are calculated monthly.**

- b. If reliability is monitored, provide the results for the past 5 years for system wide reliability.

<u>Year</u>	<u>SAIDI</u>	<u>SAIDI</u> w/o major event days	<u>CAIDI</u>	<u>CAIDI</u> w/o major event days	<u>SAIFI</u>	<u>SAIFI</u> w/o major event days
2001	170.3		71.2		2.39	
2002	134		72.4		1.85	
2003	109.4		79.6		1.37	
2004	250.2	181.2	137.3	112.6	1.47	1.27
2005	152.4	136.2	96.3	119.7	1.74	1.15

**SAIDI: Average minutes of outage per consumer.**

**(If outages were spread evenly throughout membership.)**

**CAIDI: Average duration of outage in minutes.**

**SAIFI: Number of interruptions per consumer per year.**

**(If equal to 1, then each member could expect 1 outage per year.)**

2. Are any outages excluded from your reliability measurement? If so, what criteria are used to exclude outages?

**There are not any outages excluded from the data; however, in 2006, major event days were pulled out in their own category and calculated using the IEEE formula for major event days.**

3. Does the utility differentiate between momentary and sustained outages?
  - a. What criteria are used to differentiate?

**SKRECC considers a momentary outage to be one that requires no action to restore the outage on the utilities part. Any outage requiring action by SKRECC to restore power is considered a sustained outage.**

- b. Is information about momentary interruptions recorded?

**SKRECC does not track or record momentary outages.**

4. At what level of detail does the utility record customer outages (individual customer, by re-closure, by circuit, by substation, etc.)?

**SKRECC's Outage Management System records outages at the individual customer level. A historical record of outages for any customer is available through the OMS.**

5. How does the utility detect that a customer is experiencing an outage?

**Outages are detected in different ways. SKRECC's SCADA system immediately detects outages caused by (1) a loss of transmission line voltage and (2) three-phase reclosers in the substation locking out. Outages caused by down-line sectionalizing devices locking out, individual transformer outages, and other down-line disturbances are detected when members call to report a loss of service. Planned outages are reported to dispatch. With large-scale planned outages, dispatch attempts to notify members 24 hours prior to the outage via phone or local media. The planned outages are coordinated in the OMS by the dispatch center.**

6. How does the utility know when a customer is restored?

**A SKRECC field personnel reports the restoration of power to the dispatch center and phone calls to members (on the line in question) are made to verify the restoration of power. SCADA is also used to restore the power and verify the restoration if the outage is at a feeder level.**

7. Are the causes of outages categorized and recorded? If they are, provide a list of the categories used.

**19 Categories:**

<b>Unknown Cause</b>	<b>Transformer</b>	<b>Line Fuse</b>
<b>Other animal</b>	<b>Customer Wiring</b>	<b>Broke Pole</b>
<b>Trees</b>	<b>Squirrel</b>	<b>Wind</b>
<b>Lightning</b>	<b>Bird</b>	<b>Load</b>
<b>Car Hit Pole</b>	<b>Major Storm</b>	<b>Planned</b>
<b>Transmission Line Down</b>	<b>Line Down</b>	
<b>Defective Equipment</b>	<b>Transformer Fuse Blown</b>	

8. Can the utility record outage information for each circuit in the system including for each customer outage:

- Length of each disruption? **Yes**
- Number of customers affected by each disruption? **Yes**
- Number of customers served by each circuit: **Yes**
- Cause of interruption? **Yes**

**SKRECC's OMS has the ability to record outage data by feeder including length of disruption, number of consumers affected by each disruption, total consumers on the circuit, and cause of each disruption.**

9. If the answer to any part of Item 8 is no, what would be required to enable the utility to collect this level of data?

- Provide an estimated cost to obtain this level of detail.  
**Not applicable**
- Provide an estimated timeline to implement such upgrades.  
**Not applicable**

10. Does the utility follow any type of standard ( e.g., ANSI A300 ) for trimming trees in or near to the distribution right-of-way?

**SKRECC has a spec sheet for clearing of the right-of-way in or near our distribution lines. See attachment A**

11. What criteria does the utility use to determine when vegetation maintenance or tree trimming is required?

**SKRECC uses a 6 year cycle to clear the distribution right-of-ways on a per circuit basis. In addition to the 6 year cycle, cooperative personnel and members will report areas that need attention. These reports are documented by service orders and coop right-of-way personnel verify trimming is needed. Maintenance trimming is then performed in those areas identified.**

12. Is the tree trimming performed by utility personnel or by contractor? If by contractor, describe the controls management uses to ensure trees are trimmed per utility requirements.

**SKRECC employs 4 right-of-way workers that concentrate on new member line extensions. They also work on capital work plan projects. SKRECC also has several contract crews performing cycle work and maintenance trimming. Contractors are provided with the specifications on our standard for trimming and work is inspected by cooperative right-of-way personnel.**

13. Is any portion of the utility system subject to local codes or ordinances regarding tree trimming or vegetation management?
- a. Which areas of the system are covered by local codes or ordinances?

**United States Corps of Engineers and the United States Forest Service (USFS) boundaries.**

- b. For each covered area, what do the local codes or ordinances require?

**The Corps of Engineers cover all the land that encompasses Lake Cumberland and Dale Hollow Lake. This includes shore lines of the state parks and campgrounds. The USFS encompasses part of**

**eastern and southern Pulaski County as well as McCreary County. Herbicide use (spraying) is not permitted and to clear our right-of-ways, only mowing or hand cutting is allowed. In addition, brush cutting must be chopped or broken down to prevent hot spots in case of forest fires.**

14. How often does the utility clear its distribution easements?

**SKRECC clears the distribution right-of-way on a 6 year cycle.**

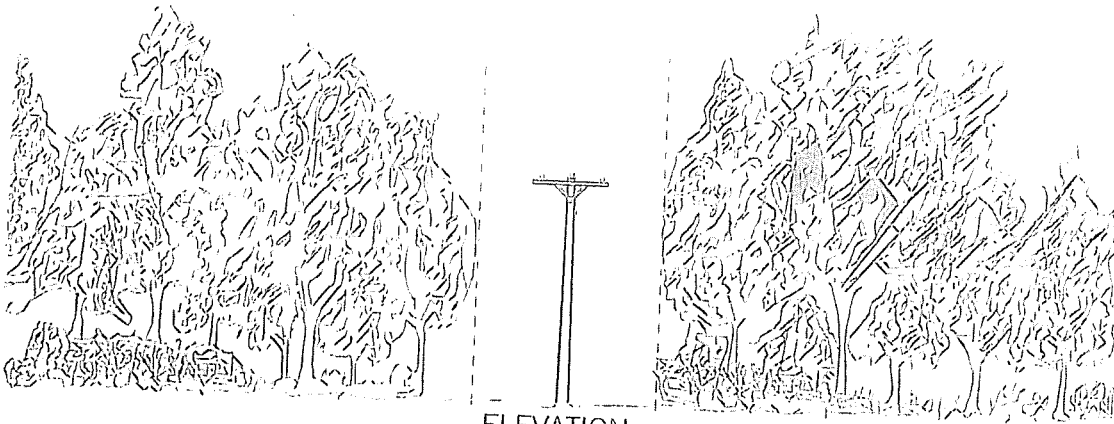
15. How much has the utility spent on distribution easement clearing for each of the last 5 years? Include the cost per mile expended.

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
<b>Total Expense</b>	<b>\$1,730,849.79</b>	<b>\$1,797,693.21</b>	<b>\$2,408,232.05</b>	<b>\$1,660,237.93</b>	<b>\$1,961,792.54</b>
<b>Total Miles Cleared</b>	<b>948</b>	<b>878.99</b>	<b>931.98</b>	<b>1275.58</b>	<b>934</b>
<b>Cost Per Mile</b>	<b>\$1,825.79</b>	<b>\$2,045.18</b>	<b>\$2,584.00</b>	<b>\$1,301.56</b>	<b>\$2,100.42</b>

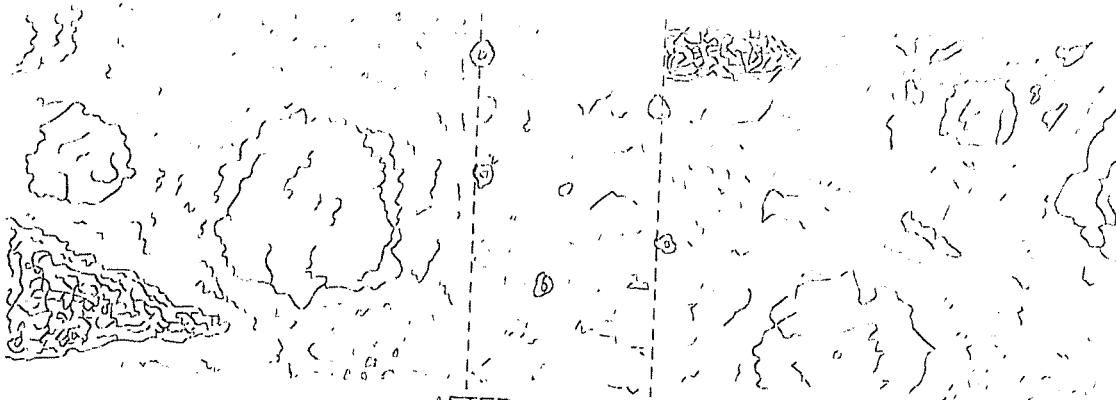
16. What annual amount of money is included in the current retail rates for distribution easement clearing?

**Per rate case 2005-00450:  
\$1,809,059**

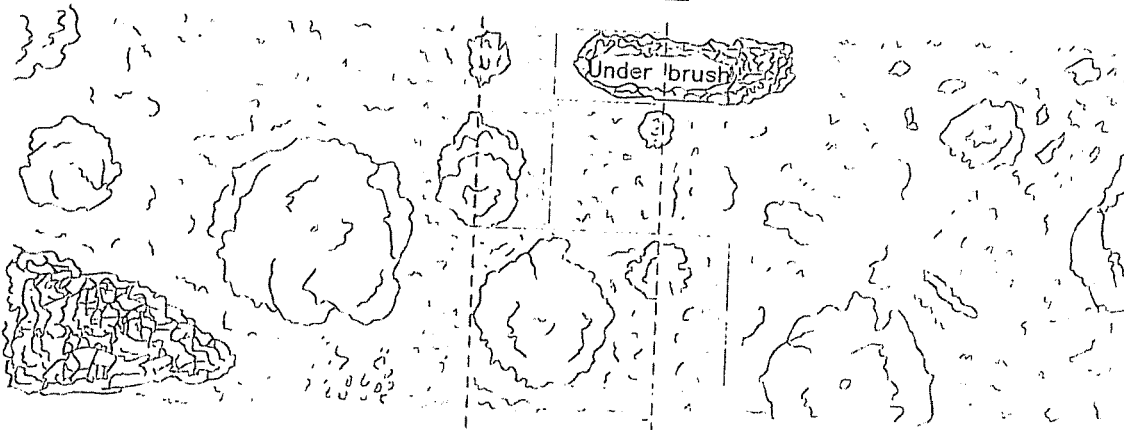
ATTACHEMENT A



ELEVATION



AFTER CLEARING



BEFORE CLEARING

SOUTH KY RECC RIGHT-OF-WAY CLEARING SPECS

1Ø CONSTRUCTION	30'
2Ø OR 3Ø CONSTRUCTION	45'
SECONDARY DUPLEX OR TRIPLEX	5' EACH SIDE

MOST OF ALL MEET MINIMUM REQUIREMENTS, PER RUS SPECS, AND DRAWINGS FOR LINE CONSTRUCTION.  
 WE ALL SPECIAL DETAILS MENTIONED ON WORK ORDER OR HAVE ENGINEER GO TO THE JOB SITE TO BE MORE SPECIFIC.  
 MOST OF ALL MAKE SURE ALL PARTIES INVOLVED ARE AWARE OF THE CHANGES BEING MADE.

CLEARING RIGHT OF WAY CDD...

AUG 2006

AUG 2006