

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF THE RELIABILITY)
MEASURES OF KENTUCKY'S) ADMINISTRATIVE
JURISDICTIONAL ELECTRIC) CASE NO. 2006-0494
DISTRIBUTION UTILITIES AND CERTAIN)
RELIABILITY MAINTENANCE PRACTICES)

ORDER

Upon its own motion, the Commission initiates this investigation into the measures used by Kentucky's jurisdictional electric utilities to assess the reliability of their distribution systems. In addition, the Commission will investigate the vegetation management practices related to the electric distribution system.

All utilities are required by statute to furnish adequate, efficient, and reasonable service.¹ Adequate service is generally defined as having sufficient capacity to meet maximum demand "and to assure such customers of reasonable continuity of service."² (emphasis added).

The Commission has established regulations that further refine these requirements for electric utilities. All electric utilities are required to provide adequate service according to their tariffs on file at the Commission.³ They are required to "make

¹ KRS 278.030(2).

² KRS 278.010(14).

³ 807 KAR 5:041, Section 2.

all reasonable efforts to prevent interruptions of service, and when such interruptions occur shall endeavor to reestablish service with the shortest possible delay.”⁴

Utilities are required by regulation to report to the Commission any “loss of service for four (4) or more hours to ten (10) percent or 500 or more of the utilities’ customers, whichever is less.”⁵ While this level of monitoring provides the Commission with information about major outages and is useful in times of emergency operations, it does not provide information regarding the day-to-day reliability experienced by ratepayers.

In the report prepared from the information provided in Administrative Case No. 2005-00090,⁶ “Kentucky’s Electric Infrastructure: Present and Future” (“Infrastructure Report”), the Commission noted that more detailed reliability indices could provide more information regarding a system’s reliability programs and provide greater consistency when reporting the results of their reliability improvement programs to the Commission or other regulatory bodies.⁷ In Case No. 2006-00090, each electric utility provided certain electric distribution reliability indices for each circuit in their system for the prior 5

⁴ 807 KAR 5:041, Section 5(1).

⁵ 807 KAR 5:006, Section 26(1)(c).

⁶ Case No. 2005-00090, An Assessment of Kentucky’s Electric Generation, Transmission and Distribution Needs, final Order issued September 15, 2005.

⁷ “Infrastructure Report” at 45.

years.⁸ Due to the variability in the electric utilities' ability to collect the data, inconsistencies in the level of detail, and their differing interpretations of "major event days," the Commission determined that it could not practically compare the results.⁹

Also in Case No. 2005-00090, the Commission reviewed the electric utilities' Right-of-Way Maintenance and Vegetation Management programs. The Commission found that right-of-way maintenance ("ROW") and vegetation management are important parts of distribution reliability management and that the establishment of a distribution ROW clearance requirement could help the utilities in preventing certain outages from occurring. The Commission further found consideration of "some practical distribution vegetation management clearing parameters for Kentucky's jurisdictional electric distribution utilities" was warranted.¹⁰

Therefore, the Commission will investigate the adequacy of the current reliability reporting requirements and whether there is a need to develop consistent standards for reporting reliability performance. In addition, the Commission intends to review the current ROW maintenance and vegetation management programs to determine the reasonableness of those activities and, if warranted, determine the need for minimum maintenance standards.

⁸ In response to the Commission's March 10, 2005 Order, Items 26-30, the electric utilities provided the System Average Interruption Duration Index ("SAIDI"), the System Average Interruption Frequency Index ("SAIFI"), Customer Average Interruption Duration Index ("CAIDI"), and the Customer Average Interruption Frequency Index ("CAIFI").

⁹ Case No. 2005-00090 final Order dated September 15, 2005 Appendix B "Summary of Proceedings," at 56.

¹⁰ "Infrastructure Report" at 45.

IT IS THEREFORE ORDERED that:

1. An investigation of the reliability measures of the jurisdictional electric distribution utilities and certain reliability practices is instituted. All jurisdictional electric distribution utilities shall be parties to this proceeding.
2. All jurisdictional electric distribution utilities shall file responses to each item in the information request contained in Appendix A. The original and 7 copies of the responses shall be filed with the Commission by the date specified in Appendix B.
3. The procedural schedule set forth in the attached Appendix B shall be followed.
4. All requests for intervention shall be made within 30 days of the date of this Order. Anyone who wishes to participate, but not intervene, will be given the opportunity to file written comments or to offer comments at the public hearing.

Done at Frankfort, Kentucky, this 12th day of December, 2006.

By the Commission

ATTEST:



Executive Director

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.
 - b. If reliability is monitored, provide the results for the past 5 years for system wide reliability.
2. Are any outages excluded from your reliability measurement? If so, what criteria are used to exclude outages?
3. Does the utility differentiate between momentary and sustained outages?
 - a. What criteria are used to differentiate?
 - b. Is information about momentary interruptions recorded?
4. At what level of detail does the utility record customer outages (individual customer, by re-closer, by circuit, by substation, etc.)?
5. How does the utility detect that a customer is experiencing an outage?
6. How does the utility know when a customer is restored?
7. Are the causes of outages categorized and recorded? If they are, provide a list of the categories used.
8. Can the utility record outage information for each circuit in the system including for each customer outage:
 - a. Length of each disruption?
 - b. Number of customers affected by each disruption?
 - c. Number of customers served by each circuit:

- d. Cause of each interruption?
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?
- a. Provide an estimated cost to obtain this level of detail.
 - b. Provide an estimated timeline to implement such upgrades.
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?
11. What criteria does the utility use to determine when vegetation maintenance or tree trimming is required?
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.
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?
 - b. For each covered area, what do the local codes or ordinances require?
14. How often does the utility clear its distribution easements?
15. How much has the utility spent on distribution easement clearing for each of the last 5 years? Include the cost per mile expended.
16. What annual amount of money is included in the current retail rates for distribution easement clearing?

APPENDIX B

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

- Commission information request to all jurisdictional electric distribution utilities..... 12/15/06
- All jurisdictional electric distribution utilities shall file responses to initial requests for information no later than01/12/07
- All supplemental requests for information to all jurisdictional electric distribution utilities shall be filed no later than.....02/09/07
- All jurisdictional electric distribution utilities shall file responses to supplemental requests for information no later than02/23/07
- Informal Conference is to begin at 9:00 a.m., Eastern Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky 03/06/07
- Jurisdictional electric distribution utilities shall file testimony, if any, in verified prepared form no later than03/23/07
- Intervenor testimony, if any, in verified prepared form shall be filed no later than04/13/07
- Last day for all jurisdictional electric distribution utilities to publish notice of hearing05/11/07
- Public Hearing is to begin at 9:00 a.m., Eastern Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky, for the purpose of cross-examination of witnesses 05/23-24/07
- Briefs, if any, shall be filed by.....06/29/07