


OWEN Electric

A Touchstone Energy Cooperative 

December 10, 2007

Director of Engineering
Public Service Commission of Kentucky
P.O. Box 615
Frankfort, Kentucky 40602

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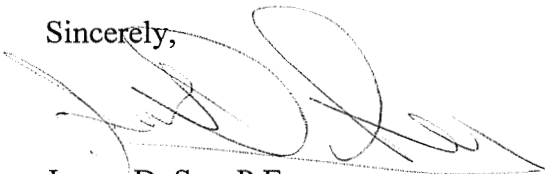
Re: Administrative Case No. 2006-00494
An investigation of the Reliability Measures of Kentucky's Jurisdictional
Electric Distribution Utilities and Certain Reliability Maintenance Practices

Attn: Director of Engineering

Please find enclosed the vegetation management plan as 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 Owen Electric Cooperative Corporation dated October 26, 2007.

Should you need additional information concerning this filing, please direct all questions to Jim See, manager of system planning and reliability. Jim can be reached via phone number 502-563-3498, e-mail jsee@owenelectric.com, or fax number 502-484-2661

Sincerely,



James D. See, P.E.
Manager of System Planning and Reliability

JS/sc

Owen Electric Cooperative Vegetation Management Plan

Revision Date 12/1/07

Owen Electric Cooperative (OEC) maintains a vegetation management plan which is structured, yet flexible. Our plan is based on circuit needs, of which we have over 100 at present made up of approximately 3000 miles of overhead primary distribution lines. Our operating territory covers roughly 2,500 square miles with a wide range of customer needs as well as soil and vegetation types. With this in mind, OEC follows a cyclical vegetation plan based on:

- Reliability criteria and reliability reports
- Determining when to perform maintenance
- Length of the clearing cycle
- Plan effectiveness

Reliability Criteria

From an index standpoint our goal is, less than one in-ROW tree related outage per 10 miles of overhead line, per year average affecting the average number of consumers on approximately 25% of the circuit, with a duration of no longer than one and one half hours. Also, no customer should experience more than three in-ROW tree related outages per year. This translates into a SAIFI of 0.090, a SAIDI of 0.136, and a CAIDI of 1.50. These are challenging goals that were starting in 2007 and may not be achieved every year. The target is three out of five years for each index.

From a reliability standpoint, beyond the indexes above, OEC also looks at line access and visibility. Over 70% of OEC's overhead distribution system is off-road so to locate outages, determine their cause, and restore power, clear, accessible, distribution lines are necessary. Therefore, a cleared ROW improves reliability significantly beyond just outages caused by trees in the ROW.

Another reliability criteria beyond the index for OEC is power quality, i.e. flickering lights due to tree contact and more recently, being able to read our Automatic Meter Reading (AMR) meters over the power line. Tree contact

does not typically cause outages on 15kV distribution lines, but does significantly affect power quality.

Reports used to develop the plan initially were the annual SAIDI, CAIDI, and SAIFI reports. These reports are still being generated and reviewed to assist with monitoring the overall ROW program. More recently, to improve reliability, we have developed a reliability team that attempts to meet monthly but at least quarterly to review all outage data. With the flexibility of the software and the extensive number of ways to review that data, reports outside of the standard SAIDI, CAIDI, SAIFI are not typically generated. Instead the data is organized during the meetings to look for system, circuits, and individual customers for frequency of outages, trends, causes, immediate problems, and any other way the team thinks the data should be looked at to help find corrective actions to improve reliability. From those meetings, if a corrective action is required or recommended, either a service order is issued or a recommendation is sent to the responsible person at OEC.

Determining When to Perform Maintenance

Based upon the criteria above with the addition of cost analysis, OEC has determined that for optimum reliability and safety at a minimum cost, that our primary distribution lines will be clear enough for access and visibility, as well as attempting to avoid tree contact with lines, and done on a scheduled basis versus “hot-spotting”.

The determination of when to perform the maintenance is done on a circuit basis due to different growth patterns of the area and amount of yard trees. (Note, yard trees are trees allowed within the ROW that are grandfathered from when the line was built and enabled OEC to build the line where it was needed initially.) The program is continually adjusted based on feedback from daily crew checking/inspections, reliability team feedback, customer complaints, any “hot-spotting” required, power quality reports, etc.

Length of Clearing Cycle

The time since the circuit was last trimmed and treated with herbicides is certainly an important factor in determining when to re-enter a circuit for maintenance and our average cycle time is approximately 4 ½ years, with some circuits requiring work in as little as 2 ½ to 3 years and others with 5

plus years before maintenance is required. Some factors to be considered here are:

- Soil type and fertility that encourages more rapid vegetation growth in areas along rivers and streams.
- Density of population per mile means more sub-divisions and thus, more yard trees. OEC appreciates the consumer's aesthetic needs, as well as the need for consumer safety and power quality. Therefore, the need to maintain a closer management cycle would exist in these areas.
- Automated Meter Reading (AMR) has further emphasized the need to maintain lines free of tree limbs because of a communication noise factor making it difficult to read the necessary information.
- Safety is the factor foremost on OEC's mind every day and every decision and report generated has the underlying safety factor to be considered.

How the Plan Effectiveness is Evaluated

In summary, all that has been mentioned here is to improve the quality of service OEC provides in a safe manor and the following information/reports are reviewed to assure that it is provided:

- "Preventable" tree outages
- System SAIDI, CAIDI, & SAIFI
- System reliability reports/reviews
- A regular review of consumer satisfaction survey answers relating to reliability and ROW clearing
- A regular review of power quality complaints
- Safety reviews and discussions
- Construction and outage crew feedback
- Daily inspections of ROW
- Monitoring "hot spotting" requirements
- Annual review of cost of clearing ROW
- ROW tracking documents to assure timely clearing and ROW spraying.