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PUBLIC SERVICE
COMMISSION

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John J. Finnigan, Jr.
Associate General Counsel

VIA OVERNIGHT DELIVERY

February 22, 2007

Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

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

Dear Ms. O'Donnell:

Enclosed are an original and seven copies of Duke Energy Kentucky, Inc.'s responses to the Staff's second set of data requests in the above-referenced case.

Please date-stamp and return the two extra copies of this letter in the enclosed envelope.

Thank you.

Sincerely,

John J. Finnigan, Jr.
Associate General Counsel

cc: All parties of record (w/encl.)

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

In the Matter of An Investigation of the)
Reliability Measures of Kentucky's) ADMINISTRATIVE
Jurisdictional Electric Distribution) CASE NO. 2006-00494 PUBLIC SERVICE
Utilities and Certain Reliability) COMMISSION
Maintenance Practices)

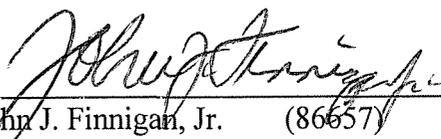
FEB 23 2007

DUKE ENERGY KENTUCKY, INC.'S
RESPONSES TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
SECOND SET OF DATA REQUESTS

Duke Energy Kentucky, Inc. submits the following responses to the
Commission's Second Set of Data Requests in this proceeding via overnight mail.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.


John J. Finnigan, Jr. (86657)
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CERTIFICATE OF SERVICE

I certify that a copy of the attached responses of Duke Energy Kentucky, Inc. to the Commission's Second Set of Data Requests in this proceeding has been served by ordinary mail to the following parties on this 22th day of February, 2007:

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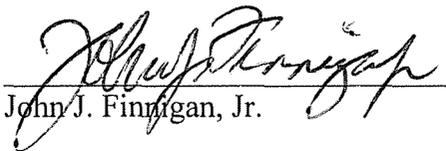
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John J. Finnigan, Jr.

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-001

REQUEST:

1. Describe in detail how the company utilizes all of the reliability measures it monitors.

RESPONSE:

Duke Energy Kentucky utilizes SAIFI, CAIDI and SAIDI to assist in evaluating the year-to-year performance of the distribution system in Kentucky. Any trends, whether up or down, are tracked throughout the year and utilized in decisions on distribution system maintenance and improvement projects and programs.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-002

REQUEST:

2. Has the company determined an appropriate operating range or performance threshold based on these measures? If yes, identify.

RESPONSE:

Duke Energy Kentucky has developed the following preferred operating range guidelines for reliability:

- o SAIDI: 104 to 127 minutes
- o CAIDI: 71 to 86 minutes
- o SAIFI: 1.32 to 1.62 outages

Duke Energy Ohio follows the same preferred operating range guidelines as Duke Energy Kentucky.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-003

REQUEST:

3. Describe in detail how the company develops formal plans to address its worst performing circuits. If the company does not develop such plans, indicate so in the response.

RESPONSE:

Duke Energy Kentucky's worst performing circuits are evaluated by the Distribution Planners and the Vegetation Management department on a regular basis. The scheduling of tree trimming operations are developed using a system that is both time-based and performance-based. Each year, capital improvement projects are proposed to either prevent overloads from occurring or to address other operational problems that have been identified. When necessary, additional maintenance will be scheduled during the year to improve circuit performance.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-004

REQUEST:

4. Why are momentary outages excluded?

RESPONSE:

Momentary outages are not included in our usual reliability reports because the other reliability measurements are deemed to be better indicators of distribution system performance. Momentary outages are tracked internally to generate a MAIFI index to compare to prior-year values. The trend for 2004 through 2006 has shown a decreasing momentary outage rate.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-005

REQUEST:

5. Why are major event days or major storms excluded?

RESPONSE:

Duke Kentucky reliability data is reported using data from both normal (Non-Major Event Days) and Major Event Days. Major Event Days are determined using the method described in IEEE Std. 1366 2.5 Beta methodology. Reporting outage data in this fashion allows for more meaningful comparisons of reliability scores over time since it reduces the often extensive year-to-year weather-caused variations in measured system performance.

WITNESS RESPONSIBLE: Larry Conrad

KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007

KyPSC-DR-02-006

REQUEST:

6. Provide a hard copy citing of the Rural Utilities Service (“RUS”) reliability monitoring or reporting requirements or, in the alternative, provide an accessible Internet site.

RESPONSE:

Duke Kentucky is not a rural co-op and we do not follow the RUS reporting requirements.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-007

REQUEST:

7. Provide and describe in detail any service restoration or outage response procedure utilized.

RESPONSE:

Service restoration and outage response procedures are contained in the Storms and Natural Disasters Emergency Plan manual. This manual is available at Duke Energy OH/KY headquarters for inspection upon request.

WITNESS RESPONSIBLE: Larry Conrad

KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007

KyPSC-DR-02-008

REQUEST:

8. Refer to the RUS drawing M1.30G "RIGHT-OF-WAY CLEARING GUIDE" ("ROW Guide"), a copy has been provided in Appendix A.
 - a. Is this type of clearance requirement appropriate for all areas of a distribution system? If not, what types of exclusions or exceptions should be made?
 - b. If the distribution utility is not already following this guide, provide an estimate of the cost and time-line to implement.

RESPONSE:

- a. A general rather than a specific clearance requirement is appropriate for most all areas of a distribution system. However, clearance requirements have to be flexible enough to allow for exceptions and adjust to the variety of conditions encountered along the ROW.

The primary type of exception will centered upon the rights available to the utility versus the rights of the land owner / customer. There may be no written easement to allow the utility to clear extensively or the easement language may limit the amount or type of work the utility can perform. In addition, consideration must be given to the environmental impact of clearing a ROW. A specific requirement to clear cut the ROW can eliminate compatible species or desirable vegetation that benefits the ecosystem. A clear cutting approach can also result in excess water run-off, erosion problems, and the destruction of wildlife habitats. A specific ROW clearing requirement may not be cost-effective in the initial phase due to the need to remove an extensive number of trees or very large trees within the designated area. However, there is cost benefit over the long-term since maintenance activities can presumably use less costly methods such as herbicides, to maintain the ROW in the future. In addition, storm restoration efforts can be expedited with better access to the facilities. It is important to maintain a balance between providing safe and reliable service, environmental and land owner impacts, along with overall cost-effectiveness.

- b. Duke Energy Kentucky currently uses a 20-foot width clearance guideline, with a ten-foot distance cleared below the conductors and removing a limited number of trees within the ROW. It is estimated that removing additional trees and underbrush within the ROW would increase cost between 30 – 50%. With consideration for current contracts a new clearing requirement could be implemented in four-six months but would require at least two maintenance cycles to complete. It may not be practical to extend to a 30-foot clearance width due to existing limitations in current easements. However, implementing this requirement would further increase costs.

WITNESS RESPONSIBLE: Everett Greene

KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007

KyPSC-DR-02-009

REQUEST:

9. Refer to North American Electric Reliability Corporation (“NERC”) standard FAC-003-1 “Transmission Vegetation Management Program” (“NERC Standard”), a copy is attached in Appendix B.
 - a. Does the company prefer the type of standard described in the NERC Standard over the type of standard described in the ROW Guide? Explain why you prefer one over the other.
 - b. Refer to section R3 of the NERC Standard and substitute “distribution” for “transmission.” Is the distribution utility capable of meeting the reporting requirements described in the section? If not, why not?
 - c. Again referring to section R3 as applied to distribution, how many sustained outages would be reportable for the calendar year 2006?

RESPONSE:

- a. No, Duke Energy does not prefer the type of standard described in the NERC Standard over the ROW guide. The minimum clearance distance required in the NERC Standard is not practical to maintain on the distribution system. The construction of the distribution system and the proximity to trees make it highly unlikely that a minimum distance can be maintained at all times throughout the year. This requirement would entail substantially more resources to monitor the system and to plan and perform the work. The seasonal growth impact of vegetation would further require significant shifts with utility employees and its suppliers to match the changes. The administrative, resource, and financial burden necessary to adhere to such a stringent requirement would not provide a corresponding benefit to improve reliability and provide increased value to customers.

The ROW Clearing Guide standard provides a more practical approach for distribution line clearance. The standard distance requirements are more feasible to manage for utility employees and provide a more consistent approach for suppliers to train their employees and adhere to quality requirements and to balance resources throughout the year.

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-010

REQUEST:

10. Provide and discuss any right-of-way maintenance standard which is preferable to those identified in questions 1 and 2 above.

RESPONSE:

This depends on one's objectives. Establishing a ROW maintenance standard alone does not necessarily provide desired improvements to overall reliability. Vegetation management practices generally have a significant impact on the reliability performance of a utility's distribution system. However, because of the unique characteristics of each utility, a more general performance standard may be the most desirable approach. Each utility should be allowed to have a high degree of discretion to design, operate and maintain its distribution system to meet a designated range of safety and reliability performance measures. The environmental conditions of one utility may be able to best meet the requirement with the use of specific equipment or automation on the system. Whereas another utility may find it more effective increase line clearance activities to best meet the requirements. Ultimately, a specific standard requirement for vegetation management may not be cost-effective.

WITNESS RESPONSIBLE: Everett Greene

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-011

REQUEST:

11. How many substations are equipped with Supervisory Control and Data Acquisition ("SCADA")? How many are not?

RESPONSE:

In the Duke Energy Kentucky service territory, 35 substations are SCADA-equipped and seven are not.

WITNESS RESPONSIBLE: Larry Conrad

**KyPSC Staff Second Set Data Requests
Duke Energy Kentucky
Case No. 2006-00494
Date Received: February 9, 2007
Response Due Date: February 23, 2007**

KyPSC-DR-02-012

REQUEST:

12. How many reclosers beyond SCADA-equipped substations are equipped with SCADA?

RESPONSE:

No reclosers beyond SCADA-equipped stations are equipped with SCADA.

WITNESS RESPONSIBLE: Larry Conrad