

P.O. Box 990 • 1201 Lexington Road • Nicholasville, Kentucky 40340-0990 Phone: (859) 885-4191 • Fax: (859) 885-2854 • www.bgenergy.com

February 23, 2007

RECEIVED

FEB 2 3 2007 PUBLIC SERVICE COMMISSION

Beth O'Donnell, Executive Director Public Service Commission P O Box 615 Frankfort KY 40602

RE: Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices

Ms. O'Donnell,

Enclosed are the original and six copies of the information as requested by the Public Service Commission for Administrative Case No. 2006-0494; Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices; Second Data Request of Commission Staff to Jurisdictional Electric Distribution Utilities.

Should you have any questions, please do not hesitate to contact me.

his herotz

Chris Brewer, Vice President, Engineering



FEB 2 3 2007

PUBLIC SERVICE COMMISSION

Commonwealth of Kentucky

Before the Public Service Commission

)

)

)

In the Matter of:

An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities and Certain Reliability Maintenance Practices

ADMINISTRATIVE CASE NO. 2006-00494

Response of BLUE GRASS ENERGY To the Second Data Request of Commission Staff to Jurisdictional Electric Distribution Utilities

Response to Question 1 Page 1 of 1 Witness: Chris Brewer

Blue Grass Energy

Administrative Case No. 2006-00494

Response to Commission's Order

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

RESPONSE ~ BGE reports its reliability measures to our board of directors at each monthly board meeting. The report is also given to key management personnel. The SAIDI numbers are reported to RUS annually on RUS Form 7. Also, the reliability measures are reviewed as a part of our preparation of our Construction Work Plans and sectionalizing studies. ,

Response to Question 2 Page 1 of 1 Witness: Chris Brewer

Blue Grass Energy

Administrative Case No. 2006-00494

Response to Commission's Order

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

RESPONSE ~ BGE has not determined a specific number for each of our reliability measures. However, we are required to report reliability measures as a part of the required RUS O&M survey (RUS Form 300) which is conducted every 3 years. BGE is required to list steps for improvement or reasons for reliability measures being lower than the satisfactory rating in the survey. RUS bulletin 1730-1 provides the guidelines related to this survey. The web address for bulletin 1730-1 is: http://www.usda.gov/rus/regs/bulls/1730-1.pdf.

Administrative Case No. 2006-00494

Response to Commission's Order

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 ~ BGE reviews outages by substation and circuits as a part of its preparation of its construction work plan. Outages are one of the factors that we consider in evaluating potential circuits that are candidates for replacement. Also, outages are reviewed as part of the sectionalizing study of the electric system.

Response to Question 4 Page 1 of 1 Witness: Chris Brewer

Blue Grass Energy

Administrative Case No. 2006-00494

Response to Commission's Order

4. Why are momentary outages excluded?

RESPONSE ~ BGE excludes momentary outages in its reporting indices because we do not have a system that provides an accurate historical count that could be used for reporting purposes.

.

Administrative Case No. 2006-00494

Response to Commission's Order

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

RESPONSE ~ BGE does not exclude major storms in its reporting indices. However we will run a separate report to exclude major storms so that we can take the volatility out of our indices that one storm could cause. This should result in the company being able to make a better comparison of how it does from year to year and give a true picture of how it is performing.

Administrative Case No. 2006-00494

Response to Commission's Order

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

RESPONSE ~ RUS requires BGE to report reliability measures as a part of the required RUS O&M survey (RUS Form 300) which is conducted every 3 years. The RUS general field representative (GFR) reviews and rates the cooperative during this process. RUS bulletin 1730-1 provides the guidelines related to this survey. The web address for accessing a copy of the bulletin that provides the guidelines of this survey is listed in the response to question # 2.

Administrative Case No. 2006-00494

Response to Commission's Order

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

RESPONSE ~ BGE restores service based on the following criteria:

- 1. Substations restored.
- 2. Main three phase circuits are restored.
- 3. Three phase taps are restored.
- 4. Single phase taps are restored.
- 5. Individual services are restored.

Priority for restoration of service will be given to situations involving downed, energized power lines that endanger life and property. Priority is also given to circuits involving hospitals and other emergency operations. Consumers with health priorities will be given priority where possible.

Administrative Case No. 2006-00494

Response to Commission's Order

- 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?

 $RESPONSE \sim$ In general, our experience bears out the adequacy of RUS M1.30G as a right-of-way clearing guide for maintaining reliable, non-covered, electric distribution lines that operate within the nominal voltage range of 7.2/12.47 \sim 14.4/25 kV.

As stated above, we contend that the RUS M1.30G guide is "in general" a practical method; however, depending upon specific conditions and/or circumstances, additional factors must be considered. Following is a partial list of such variables (not all-inclusive) after safety issues are met:

- Nominal voltage
- Access to clearing and/or repair equipment
- Type of vegetation
- Type of easement
- Governmental and/or legal mandates
 - National/State Parks
 - Recorded subdivision utility setbacks
- Reliability consequences
- Height and/or condition of trees
 - o Dead trees
 - Very tall and/or leaning trees
- Lay and/or condition of ground (earth)
 - Very sloped
 - Prone to mud slides
- Height of conductors above ground level
- Property owners

Administrative Case No. 2006-00494

Response to Commission's Order

b. If the distribution utility is not already following this guide, provide an estimate of the cost and time-line to implement.

 $RESPONSE \sim$ We contend that adherence to this guide with all variables considered has been in the forefront of our impetus to provide ongoing and continually improving, electric safety and service reliability. The cost and time-line for adherence to this guide should be within the present expense and scope of BGE's right-of-way program.

Administrative Case No. 2006-00494

Response to Commission's Order

- 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.

RESPONSE ~ BGE prefers the type of standard described within the RUS M1.30G guide. We contend that a formal/rigid standard would bring about the problems mentioned in our response to DR Question 8. We feel that the NERC Standards are more suitable for transmission facilities where an extra level of reliability is vitally important. The additional requirements as detailed within the IEEE Standard are warranted for the nominal voltage levels of transmission facilities. Distribution facilities are different from transmission because we must cultivate and maintain an ongoing working relationship with the membership and deal with such on a daily basis. Also, there are places that distribution utilities can efficiently sectionalize an occurrence to minimize consumer outages. Transmission lines outages can easily cascade to other substations, transmission facilities, generations and even other reliability centers.

Administrative Case No. 2006-00494

Response to Commission's Order

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? Why or why not?

 $RESPONSE \sim$ We are incapable of providing these reporting requirements on past outages, but we believe it could be done on future outages if it became a requirement; however, it would require much more detailed work on our part, and it would be an increased burden on us both logistically and financially. We believe that the extra costs, such as those associated with reporting to an RRO would not be justifiable for distribution cooperatives. These costs would ultimately be paid by our members in the form of higher rates.

Administrative Case No. 2006-00494

Response to Commission's Order

c. Again referring to section R3 as applied to distribution, how many sustained outages would be reportable for the calendar year 2006?

 $RESPONSE \sim$ For the calendar year of 2006, we are only able to ascertain the total number of outages we have recorded for vegetation. This number is 238. We do not have the data to determine how to classify these outages into the different vegetation categories as defined by R3 (such as animal activity, floods, etc). Therefore, we do not know how many of the 238 vegetation outages would actually be reportable per the requirements of the NERC standards.

Administrative Case No. 2006-00494

Response to Commission's Order

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

 $RESPONSE \sim$ We believe that "Question 10" refers to 8 and 9 above instead of "question 1 and 2" as written.

We contend that each utility should be able to establish safe, reasonable and prudent standards based upon its unique operating requirements and circumstances. Governing agencies such as the PSC and RUS must maintain the ability to measure/judge the utility by reviewing performance data such as safety issues and historical outage indices and mandate changes as required by established laws and/or codes.