




Blue Grass Energy

A Touchstone Energy Cooperative 

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

January 5, 2007

RECEIVED

JAN 8 2007

PUBLIC SERVICE
COMMISSION

Beth O'Donnell
Executive Director
P O Box 615
Frankfort KY 40602

Enclosed are the original and seven copies of the information as requested
by the Public Service Commission for Administrative Case No. 2006-0494.



Michael I Williams, Senior Vice President

APPENDIX TO AN ORDER OF KENTUCKY PUBLIC SERVICE
COMMISSION IN ADMINISTRATIVE CASE NO. 2006-00494

1. Does utility management measure, monitor, or track distribution reliability?
- **Yes.**
 - a. If so, describe the measures used and how they are calculated.
 - **Blue Grass Energy measures, monitors and tracks distribution reliability using the following outage indices:**

SAIFI (System Average Interruption Frequency Index)

$$\text{SAIFI} = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

SAIDI (System Average Interruption Duration Index)

$$\text{SAIDI} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

CAIDI (Customer Average Interruption Duration Index)

$$\text{CAIDI} = \frac{\text{Total Duration of Customer Interruptions}}{\text{Total Number of Customer Interruptions}}$$

- b. If reliability is monitored, provide the results for the past 5 years for system wide reliability.
- **Please note that the indices are in minutes and not hours for the SAIDI and CAIDI calculations.**

Year	SAIFI	SAIDI	CAIDI
2002	1.0538	108.4426	102.9096
2003	1.3664	113.2220	82.8608
2004	2.0065	192.7125	96.0434
2005	1.3252	118.0533	89.0858
2006	1.2372	142.1907	114.9319

2. Are any outages excluded from you reliability measurement? If so, what criteria are used to exclude outages?
- **We track all outages for our reliability measurements. However, we will run a second set of reliability indices to exclude major storm outages. Major storm outages are defined as outages where 10% of the customers in the affected district are out for at least 24 hours. The numbers in response to question 1 are the reliability numbers with out major storms.**
3. Does the utility differentiate between momentary and sustained outages?
- **Yes**

- a. What criteria are used to differentiate?
 - **Any outage that is less than 30 seconds is considered a momentary outage.**
 - b. Is information about momentary interruptions recorded?
 - **BGE is currently installing an automatic meter reading system that can detect momentary outages. This information can be used for operational issues such as determining if lights have been blinking in a general area. However, this system does not provide an accurate historical count that could be used for reporting.**
4. At what level of detail does the utility record customer outages (individual customer, by re-closer, by circuit, by substation, etc)?
 - **Blue Grass Energy records outages down to the individual customer.**
 5. How does the utility detect that a customer is experiencing an outage?
 - **Blue Grass Energy detects customer outages by a SCADA system and by customer phone calls.**
 6. How does the utility know when a customer is restored?
 - **Blue Grass Energy detects outage restoration by our SCADA system, by in field observation and by calling selected customers to verify that their power has been restored.**
 7. Are the causes of outages categorized and recorded? If they are, provide a list of the categories used.
 - **Blue Grass Energy records causes of outages and equipment involved based on the following categories:**

Cause of Outage

Power Supplier	Sag/Clearance	Wind-not trees	Public Accident
Construction	Deterioration	Ice/Snow-not trees	Vandalism
Maintenance	Contamination	Trees	Fire
Major Storm	Overload	Small Animal S.C.	Unknown
Equipment Fault	Lightning	Large Animal G/P	

Material Responsible

Pole	Connector	OCR/Sect-Line	Transformer Fuse/Res
Crossarm/Brace	Jumper	URD Primary	Transformer Arrestor
Anchor/Guy	Insulator	URD Secondary Spl. /Fit.	Open OCR/Fuse?
Breaker	Arrester-Line	Transformer Replace	
Conductor	Fuse-Line		

8. Can the utility record outage information for each circuit in the system including each customer outage:
- **Our answers to this question are based on BGE's interpretation of the question.**
 - a. Length of each disruption?
 - **Yes**
 - b. Number of customers affected by each disruption?
 - **Yes**
 - c. Number of customer served by each circuit?
 - **Yes**
 - d. Cause of each interruption?
 - **Yes, if the line personnel can determine the cause, other wise the outage is recorded with an unknown cause.**
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?
- **N/A**
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?
- **Yes, NESC 218 and RUS specifications Unit R1**
11. What criteria does the utility use to determine when vegetation maintenance or tree trimming is required?
- **Right of Way is trimmed on a cycle schedule and as needed.**
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.
- **Right of way is trimmed primarily by contractors; utility employees trim to restore service. All right of way trimmed by contracted labor is inspected prior to payment.**
13. Is any portion of the utility system subject to local codes or ordinances regarding tree trimming or vegetation management?
- **No.**
14. How often does the utility clear its distribution easements?
- **Our current distribution easement clearing strategy recommends a five 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.

Year	Cost/Year	Cost/Mile
2002	\$1,727,046	\$2603
2003	\$2,485,147	\$3178
2004	\$2,132,667	\$2825
2005	\$1,714,121	\$2838
2006 (Projected)	\$1,674,858	\$2,300

- **The above costs include distribution easement clearing, applicable overheads and herbicidal treating with the exception of the year 2006.**

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

- **The annual amount of money for distribution easement clearing included in the retail rates was based on general rate filings prior to January 1, 1998 when our first consolidation became effective. The last general rate case filed for Blue Grass Energy was in 1983. Based on this time frame the distribution easement cost included in the retail rates is unknown due to the length of time since the general filings.**