



# FARMERS RURAL ELECTRIC COOPERATIVE

P.O. Box 1298 • 504 South Broadway • Glasgow, KY 42142-1298  
Tel. (270) 651-2191 • (800) 253-2191 • Fax: (270) 651-7332

January 11, 2007

Ms. Elizabeth O'Donnell  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40602

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COMMISSION

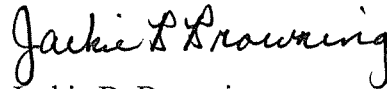
RE: Administrative Case No. 2006-00494

Dear Ms. O'Donnell:

Please find enclosed an original and seven copies of the response of Farmers Rural Electric Cooperative Corporation to the data request of the Commission dated December 12, 2006 in the above-styled matter. I certify that a copy of this filing has been served on the persons shown on the service list attached.

Thank you for cooperation in this matter. Please contact me at (270) 651-2191 if you have any questions.

Sincerely,



Jackie B. Browning  
President & CEO

Enclosures

Service List for Case No. 2006-00494

Allen Anderson  
South Kentucky R.E.C.C.  
P.O. Box 910  
Somerset, KY 42502-0910

Mark A. Bailey  
Kenergy Corporation  
P.O. Box 1389  
Owensboro, KY 42302-1389

Kent Blake  
Kentucky Utilities Company  
P.O. Box 32010  
Louisville, KY 40232-2010

Kent Blake  
Louisville Gas & Electric Company  
P.O. Box 32010  
Louisville, KY 40232-2010

Debbie Martin  
Shelby Energy Cooperative  
620 Old Finchville Road  
Shelbyville, KY 40065

Daniel W. Brewer  
Blue Grass Energy Cooperative  
P.O. Box 990  
Nicholasville, KY 40340-0990

Jackie B. Browning  
Farmers R.E.C.C.  
P.O. Box 1298  
Glasgow, KY 42142-1298

Sharon K. Carson  
Jackson Energy Cooperative  
115 Jackson Energy Lane  
McKee, KY 40447

Service List for Case No. 2006-00494

Lawrence W. Cook  
Office of Attorney General  
Utility & Rate Intervention  
1024 Capital Center Drive  
Suite 200  
Frankfort, KY 40601-8204

Duke Energy Kentucky, Inc.  
139 East Fourth Street  
Cincinnati, OH 45202

Paul G. Embs  
Clark Energy Cooperative  
P.O. Box 748  
Winchester, KY 40392-0748

Carol H. Fraley  
Grayson R.E.C.C.  
109 Bagby Park  
Grayson, KY 41143

Ted Hampton  
Cumberland Valley Electric  
Highway 25E  
Gray, KY 40734

Larry Hicks  
Salt River Electric Cooperative  
P.O. Box 609  
Bardstown, KY 40004-0609

Kerry K. Howard  
Licking Valley R.E.C.C.  
P.O. Box 605  
West Liberty, KY 41472

James L. Jacobus  
Inter-County Energy Cooperative  
P.O. Box 87  
Danville, KY 40423-0087

Service List for Case No. 2006-00494

Robert Hood  
Owen Electric Cooperative  
P.O. Box 400  
Owenton, KY 40359-0400

Burns E. Mercer  
Meade County R.E.C.C.  
P.O. Box 489  
Brandenburg, KY 40108-0489

Michael L. Miller  
Nolin R.E.C.C.  
411 Ring Road  
Elizabethtown, KY 42701-8701

Timothy C. Mosher  
American Electric Power  
P.O. Box 5190  
Frankfort, KY 40602

Barry L. Myers  
Taylor County R.E.C.C.  
P.O. Box 100  
Campbellsville, KY 42719-0100

G. Kelly Nuckols  
Jackson Purchase Energy Corporation  
P.O. Box 4030  
Paducah, KY 42002-4030

Anthony P. Overbey  
Fleming-Mason Energy Cooperative  
P.O. Box 328  
Flemingsburg, KY 41041

Bobby D. Sexton  
Big Sandy R.E.C.C.  
504 11<sup>th</sup> Street  
Paintsville, KY 41240-1422

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION  
OF KENTUCKY

In the Matter of:

AN INVESTIGATION OF THE RELIABILITY	)	
MEASURES OF KENTUCKY'S	)	ADMINISTRATIVE
JURISDICTIONAL ELECTRIC	)	CASE NO. 2006-00494
DISTRIBUTION UTILITIES AND CERTAIN	)	
RELIABILITY MAINTENANCE PRACTICES	)	

FARMERS RURAL ELECTRIC COOPERATIVE CORPORATION RESPONSE TO THE  
INFORMATION REQUESTS CONTAINED IN COMMISSION'S ORDER OF  
DECEMBER 12, 2006

January 12, 2007

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JAN 12 2007

PUBLIC SERVICE  
COMMISSION



FARMERS RURAL ELECTRIC COOPERATIVE CORPORATION

PSC ADMINISTRATIVE CASE NO. 2006-00494

AN INVESTIGATION OF THE RELIABILITY MEASURES OF KENTUCKY'S  
JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITIES AND CERTAIN  
RELIABILITY MAINTENANCE PRACTICES

RESPONSE TO COMMISSION'S FIRST DATA REQUEST DATED DECEMBER 12, 2006

REQUEST 1

RESPONSIBLE PARTY: Tony Wells

REQUEST 1. Does utility management measure, monitor, or track distribution reliability?

RESPONSE 1. Yes.

REQUEST 1a. If so, describe the measures used and how they are calculated.

RESPONSE 1a. Farmers uses System Average Interruption Duration Index (SAIDI) data to measure, monitor, and track distribution reliability. The following equation is used to calculate the index:

$$\text{SAIDI} = \frac{\sum \text{Customer Interruption Durations}}{\text{Average Number of Customers Served}}$$

REQUEST 1b. If reliability is monitored, provide the results for the past 5 years for system wide reliability.

RESPONSE 1b. Shown below is system wide SAIDI data for Farmers for the past 5 years.

### SAIDI Summary

#### Average Annual Hours per Consumer by Cause

Year	Power Supplier Scheduled	Power Supplier Unscheduled	Farmers Major Storm	Farmers Scheduled	Farmers Unscheduled	Total
2001	0.00	0.00	0.00	0.09	2.75	2.84
2002	0.00	0.27	0.00	0.11	3.81	4.19
2003	0.00	0.20	0.27	0.05	2.26	2.78
2004	0.00	0.32	14.00	0.04	2.79	17.15
2005	0.01	0.71	0.00	0.02	2.85	3.59
Average	0.00	0.30	2.85	0.06	2.89	6.11





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REQUEST 2

RESPONSIBLE PARTY: Tony Wells

REQUEST 2. Are any outages excluded from your reliability measurement? If so, what criteria are used to exclude outages?

RESPONSE 2. No.



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REQUEST 3

RESPONSIBLE PARTY: Tony Wells

REQUEST 3. Does the utility differentiate between momentary and sustained outages?

RESPONSE 3. Yes.

REQUEST 3a. What criteria are used to differentiate?

RESPONSE 3a. Outages lasting 5 minutes or less are considered momentary. Outages lasting more than 5 minutes are considered sustained.

REQUEST 3b. Is information about momentary interruptions recorded?

RESPONSE 3b. No.



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REQUEST 4

RESPONSIBLE PARTY: Tony Wells

REQUEST 4. At what level of detail does the utility record customer outages (individual customer, by re-closer, by circuit, by substation, etc.)?

RESPONSE 4. Farmers records and tracks outages at the individual customer level.



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REQUEST 5

RESPONSIBLE PARTY: Tony Wells

REQUEST 5. How does the utility detect that a customer is experiencing an outage?

RESPONSE 5. Farmers relies on customer notification of an interruption of service.





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REQUEST 6

RESPONSIBLE PARTY: Tony Wells

REQUEST 6. How does the utility know when a customer is restored?

RESPONSE 6. If an outage is the result of a problem on distribution primary facilities, utility personnel verify that the distribution primary facilities have been reenergized before leaving the site. Farmers does not verify that service has been restored to every customer affected by a distribution primary outage.

If the outage is the result of a problem on distribution secondary or service facilities, utility personnel verify that service has been restored to the customer before leaving the site.



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REQUEST 7

RESPONSIBLE PARTY: Tony Wells

REQUEST 7. Are the causes of outages categorized and recorded? If they are, provide a list of the categories used.

RESPONSE 7. Yes. Farmers uses the following categories to identify the causes of outages.

<u>Category</u>	<u>Subcategory</u>
Age or Deterioration	Decay
Age or Deterioration	Woodpeckers
Age or Deterioration	Corrosion
Age or Deterioration	Contamination
Age or Deterioration	Moisture
Age or Deterioration	Electrical Overload
Age or Deterioration	Other

--- List continued on following page ---

----- Category	----- Subcategory
Birds, Animals	Small, Cause Short Circuit
Birds, Animals	Large, Forced Pole or Anchor
Birds, Animals	Other, Not Woodpeckers
Equipment or Installation	Material or Equipment Failure
Equipment or Installation	Improper Installation
Equipment or Installation	Sag, Clearance
Equipment or Installation	Other
Major Storm	Major Storm
Public	Vehicle Accident
Public	Aircraft Accident
Public	Accident, Other
Public	Vandalism
Public	Fire
Public	Other
Right-of-Way	Trees
Right-of-Way	Vines
Scheduled	Construction
Scheduled	Maintenance
Scheduled	Other
Power Supplier	Power Supplier
Unknown	Unknown
Weather	Lightning
Weather	Wind, Not Trees
Weather	Ice, Not Trees
Weather	Trees and Ice
Weather	Trees, Other
Weather	Other



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REQUEST 8

RESPONSIBLE PARTY: Tony Wells

REQUEST 8. Can the utility record outage information for each circuit in the system including for each customer outage:

RESPONSE 8. Yes.

REQUEST 8a. Length of each disruption?

RESPONSE 8a. Yes.

REQUEST 8b. Number of customers affected by each disruption?

RESPONSE 8b. Yes.

REQUEST 8c. Number of customers served by each circuit?

RESPONSE 8c. Yes.

REQUEST 8d. Cause of each interruption?

RESPONSE 8d. Yes.





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REQUEST 9

RESPONSIBLE PARTY: Tony Wells

REQUEST 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?

RESPONSE 9. Not applicable.

REQUEST 9a. Provide an estimated cost to obtain this level of detail.

RESPONSE 9a. Not applicable.

REQUEST 9b. Provide an estimated timeline to implement such upgrades.

RESPONSE 9b. Not applicable.



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REQUEST 10

RESPONSIBLE PARTY: Jerry Carter

REQUEST 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?

RESPONSE 10. No.



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REQUEST 11

RESPONSIBLE PARTY: Jerry Carter

REQUEST 11.        What criteria does the utility use to determine when vegetation maintenance or tree trimming is required?

RESPONSE 11.     Farmers uses the following criteria to determine when vegetation maintenance or tree trimming is required:

- a.     Time interval from last maintenance cycle.
- b.     Tree species and growth patterns.
- c.     System reliability records.
- d.     Line inspections.
- e.     Reports from utility personnel and public.



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REQUEST 12

RESPONSIBLE PARTY: Jerry Carter

REQUEST 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.

RESPONSE 12. Tree trimming is performed by both utility personnel and a contractor. The work performed by the contractor is closely monitored by Farmers Right-of-Way Superintendent and the contractor's General Foreman. Following completion of the work, the Right-of-Way Superintendent and General Foreman perform a visual inspection of the work area to ensure that adequate clearances have been achieved and that the work has done in accordance with accepted practices.





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REQUEST 13

RESPONSIBLE PARTY: Jerry Carter

REQUEST 13. Is any portion of the utility system subject to local codes or ordinances regarding tree trimming or vegetation management?

RESPONSE 13. No.

REQUEST 13a. Which areas of the system are covered by local codes or ordinances?

RESPONSE 13a. Not applicable.

REQUEST 13b. For each covered area, what do the local codes or ordinances require?

RESPONSE 13b. Not applicable.



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REQUEST 14

RESPONSIBLE PARTY: Jerry Carter

REQUEST 14. How often does the utility clear its distribution easements?

RESPONSE 14. Farmers has established a 6-year maintenance cycle for its distribution right-of-way easements. A 2-year trimming cycle has been established for locations with fast growing tree species.



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REQUEST 15

RESPONSIBLE PARTY: Jerry Carter

REQUEST 15. How much has the utility spent on distribution easement clearing for each of the last 5 years? Include the cost per mile expended.

RESPONSE 15. Farmers does not track right-of-way maintenance expense on a per mile basis. The total right-of-way maintenance expense for each of the last 5 years is shown below:

<u>Year</u>	<u>Right-of-Way Maintenance Expense</u>
2001	\$640,911
2002	\$713,367
2003	\$746,265
2004	\$765,051
2005	\$842,820



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REQUEST 16

RESPONSIBLE PARTY: Jerry Carter

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

RESPONSE 16. Farmers spent \$842,820 on distribution easement clearing in 2005. This represents 2.428 percent of the revenue Farmers received from its sales of electricity.