COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JACKSON PURCHASE ELECTRIC COOPERATIVE CORPORATION

CASE NO. 94-013

ALLEGED VIOLATION OF COMMISSION REGULATIONS 807 KAR 5:006 AND 807 KAR 5:041

ORDER

Jackson Purchase Electric Cooperative Corporation ("Jackson Purchase"), a Kentucky corporation which engages in the distribution of electricity to the public for compensation for light, heat, power, and other uses, and which was formed under KRS 279.010 to 279.220, is a utility subject to Commission jurisdiction. KRS 278.010; KRS 279.210.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated Commission Regulation 807 KAR 5:041, Section 3, which requires electric utilities to maintain their plant and facilities in accordance with the standards of the National Electrical Safety Code (1990 edition) ("NESC"). It also promulgated Commission Regulation 807 KAR 5:006, Section 24, which requires a utility to adopt and execute a safety program. Commission Staff has submitted to the Commission an Electrical Utility Accident Investigation Report dated October 21, 1993, appended hereto, which alleges:

1. On August 20, 1993, Gregory M. Conyers was fatally injured while setting a new utility pole at 1475 Powers Road, Paducah, Kentucky.

2. John A. Martin was injured in the same incident.

3. At the time of the incident, Conyers, Martin, Terry Dublin, and Bill McElya were setting an in-line pole in a single phase 7200-volt overhead line. Martin and Conyers were framing the new pole which was leaning against a derrick truck's front tire. McElya was operating the derrick truck and was digging the hole for the pole. Dublin was working near the auger of the derrick truck.

4. The 7200-volt line was not deenergized or covered with a protective device or spread.

5. The derrick truck's boom came into contact with the 7200volt line and energized the truck. As a result, Martin and Conyers received strong electric shocks. Conyers fell to the ground. As he attempted to right himself, Conyers grabbed the derrick truck's rear step and was electrocuted.

6. At the time of the incident, Conyers, Dublin, Martin, and McElya were employees of Jackson Purchase and acting within the scope of their employment.

7. At the time of the incident, McElya was in charge of the work crew.

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8. At the time of the incident, no member of the work crew was wearing protective clothing or using protective equipment.

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9. At the time of the incident, the derrick truck was not bonded to an effective ground.

10. NESC Section 422A.2 requires employees standing on the ground or in contact with grounded objects to avoid contact with trucks which are not bonded to an effective ground and being used to set, move, or remove poles in or in the vicinity of energized lines unless these employees are wearing suitable protective equipment.

11. NESC Section 420C.5 prohibits a person from bringing any conductive object, without a suitable insulating handle, within certain distances of any exposed energized part.

12. American Public Power Association Safety Manual (Eighth edition) ("AFPA") Rule 519d requires conductors to be deenergized, covered with protective devices or spread, or the use of pole guards when setting utility poles between or near conductors energized above 600 volts. It also prohibits the attachment of ground wires on a utility pole higher than 10 feet from the ground.

13. APPA Rule 520 prohibits the operation of mechanical equipment within certain distances of any energized line or equipment unless that equipment is certified for work on the proper voltage or certain safety precautions are taken.

14. At the time of the incident Jackson Purchase had adopted the APPA as part of its safety program.

15. While attempting to set the pole, Conyers, Dublin, Martin, and McElya failed to comply with NESC Sections 422A.2 and 420C.5 and APPA Rules 519d and 520.

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16. McElya failed to see that all safety and operating procedures were observed by those under his direction. His failure is a violation of NESC Rule 421A which requires a person in charge to adopt such precautions as are within his authority to prevent accidents and to see that all safety rules and operating procedures are observed by those under his direction.

17. As a result of these failures, Jackson Purchase is in probable violation of Commission Regulations 807 KAR 5:006, Section 24, and 807 KAR 5:041, Section 3.

Based on its review of the Electrical Utility Accident Investigation Report and being otherwise sufficiently advised, the Commission finds that <u>prima facie</u> evidence exists that Jackson Purchase has failed to comply with Commission Regulations 807 KAR 5:006, Section 24, and 807 KAR 5:041, Section 3.

The Commission, on its own motion, HEREBY ORDERS that:

1. Jackson Purchase shall appear before the Commission on February 23, 1994, at 10:00 a.m., Eastern Standard Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of Commission Regulation 807 KAR 5:006, Section 24, and 807 KAR 5:041, Section 3, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

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2. Jackson Purchase shall submit to the Commission, within 20 days of the date of this Order, a written response to the allegations contained in the Electrical Utility Accident Investigation Report.

3. The Electrical Utility Accident Investigation Report of October 21, 1993, a copy of which is appended hereto, is made part of the record of this proceeding.

4. Any motion requesting any informal conference with Commission Staff for any purpose shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 12th day of January, 1994.

PUBLIC SERVICE COMMISSION

Vice Chairman

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ATTEST:

Executive Director

APPENDIX

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APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-013 DATED January 12, 1994

ELECTRICAL UTILITY ACCIDENT INVESTIGATION

ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued) new pole which was alleged to have been against the front tire on the truck which resulted in Martin and Conyers being shocked and apparently caused Conyers to fall. It is believed that Conyers was fatally injured when he tried to get up and apparently grabbed hold of the rear step on the truck which had become energized. Terry Dublin was near the auger of the digger derick truck at the time of the accident. SOURCE OF INFORMATION See attachment: B Jackson Purchase

Personnel.

PROBABLE VIOLATIONS OF COMMISSION REGULATIONS <u>Commission</u> Regulation 807 KAR 5:041 (Electric), Section 3(2) requires that each electric utility construct and maintain its plant in accordance with the National Electric Safety Code, ANSI C-2 1990 Edition ("NESC"). Commission Regulation 807 KAR 5:006 (General Rules), Section 24, requires that each utility shall adopt and execute a safety program. Jackson Purchase RECC had adopted the American Public Power Association Safety Manual, Eighth Edition ("APFA") as part of its safety program. There are four probable violations involved in the accident and are as follows: (1) The NESC Section 42 subsection 421 A. 1 & 2 requires a person in charge to adopt such precautions as are within his authority to prevent accidents and see that the safety rules and operating procedures are observed. ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued) (2) The NESC Section 42 subsection 422 A. 2. states that trucks, or other equipment, which are not bonded to an effective ground, being used to set, move, or remove poles in or in the vicinity of energized lines shall be avoided by employees standing on the ground or in contact with grounded objects unless employees are wearing suitable protective equipment.

(3) The APPA Section 5 subsection 519 (d)(1)(4) requires that if safe clearance cannot be maintained, the conductors shall be deenergized, covered with protective devices, spread, or pole guards shall be used to minimize accidental contact. Ground wires shall not be attached on the pole higher than 10 feet from the ground. (4) The NESC Section 42 subsection 420 C.5. -- subsection 441 A.1. and APPA Section 5 subsection 520 states that Derrick Trucks with exception of equipment certified for work on the proper voltage, shall not be operated closer to any energized line or equipment than the clearance set forth in Table 5-1 unless: (1) An insulated barrier is installed between the energized part and the mechanical equipment, or (2) The mechanical equipment is grounded, or (3) The mechanical equipment is insulated, or (4) The mechanical equipment is considered as energized. **RECOMMENDATIONS** It is recommended that the Commission consider action in accordance with KRS 278.990, due to Jackson Purchase RECC's employees probable violation of Commission Regulations 807 KAR 5:041, Section 3(2) and 807 KAR 5:006, Section 24.

CORRECTIVE ACTION None taken at this time.

ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued)

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	As Measured	Ninimum Allowed by NESC 1990 Editions
A. AT POINT OF ACCIDENT		
Phase conductor to ground elevation:	24'-2_1/2"	18"-6"
Neutral conductor to ground elevation:	<u>18'-2"</u>	15'-6"
Communication conductor to ground elevation:	16'-8 1/2"	15'-6"
Phase conductor to structure:	<u>N/A</u>	N/A
Neutral conductor to structure:	N/A	N/A
Communication conductor to structure:	<u>N/A</u>	N/A
B. AT LOWEST POINT OF SI	PAN	
Phase conductor to ground elevation:	24'-2 1/2"	18'-6"
Neutral conductor to ground elevation:	18'-2"	15'-6"
Communication conductor to ground elevation:	16'-8 1/2"	15'-6"
C. SPAN LENGTH 496 feet		
Date the line or facilities were constructed: 1993		
Voltage of line or facilities: 7.2 KV		
Date last inspected by utility: 1992		
Utility: Jackson Purchase Electric Cooperative Corporation		

ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued)

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 Date:
 8/17/93
 Time: Approximately 2 P.M.(CST)

 Approximate temperature:
 Approximately 95 degrees F.

 Measurements made by:
 John W. Land and Martha M. Morton of the

 PSC Engineering Staff.

John Land Submitted by:

Persons assisting in the investigation. Jackson Purchase Personnel Bill McElya - Subforman (JP) Tony Martin - Journeyman (JP) Terry Dublin - Apprentice Lineman (JP) Donnie Lannier - Mgr. Operations (JP) Don Schaefer - Mgr. Engineering (JP) Greg Morgan - Safety Director - KAEC (Kentucky Association of Electric Coops) Ms. Martha Morton - Mgr. PSC Electric Branch

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