### COMMONWEALTH OF KENTUCKY

### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SOUTH KENTUCKY RURAL ELECTRIC COOPERATIVE CORPORATION

CASE NO. 94-518

)

ALLEGED VIOLATIONS OF COMMISSION REGULATION 807 KAR 5:041

### <u>ORDER</u>

South Kentucky Rural Electric Cooperative Corporation ("South Kentucky"), 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").

Commission Staff has submitted to the Commission an Electrical Utility Accident Investigation Report dated August 29, 1994, appended hereto, which alleges:

1. On August 4, 1994, Jeff Belcher received an electric shock when the track drill which he was operating came into contact

with a 120-volt electric underground service. The underground service was located on or near Kentucky Highway 769, approximately two miles from Somerset, Kentucky.

2. At the time of the incident, the electric underground service in question failed to comply with the minimum burial depth standards set forth in National Electrical Safety Code Section 353D2.

3. At the time of the incident, South Kentucky owned and operated the underground service.

4. As a result of its failure to bury the underground service at an acceptable depth, South Kentucky is in probable violation of Commission Regulation 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 South Kentucky has failed to comply with Commission Regulation 807 KAR 5:041, Section 3.

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

1. South Kentucky shall appear before the Commission on March 24, 1995 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 violation of Commission Regulation 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 this alleged violation.

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2. South Kentucky 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 August 29, 1994, 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 to consider any matter which would aid in the handling or disposition of this proceeding shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 21st day of December, 1994.

PUBLIC SERVICE COMMISSION

Vice Chairman

Commissi

Commissioner

ATTEST:

Executive Director

### APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 94-518 DATED DECEMBER 21, 1994 ELECTRICAL UTILITY ACCIDENT INVESTIGATION

DATE OF THIS REPORT 8-29-94 SUBMITTED BY Elie El-Rouaiheb NAME OF UTILITY South Kentucky RECC ACCIDENT REPORTED BY Donnie Burdine DATE ACCIDENT OCCURRED 8-4-94 at 6:15 p.m. DATE & TIME UTILITY LEARNED OF ACCIDENT 8-4-94 at 6:37 p.m. DATE & TIME ACCIDENT REPORTED 8-4-94 at 8:45 p.m. DATE OF ACCIDENT INVESTIGATION 8-5-94 DATE SUMMARY WRITTER REPORT WAS RECEIVED FROM UTILITY 8-8-94 PERSONS ASSISTING IN THE INVESTIGATION Jackson Denham of South Kentucky RECC and Martha M. Morton of PSC NAME OF VICTIM Jeff Belcher SEX M AGE N/A PATAL NO NAME OF EMPLOYER M & D General Contractors INJURIES Mr. Belcher received an electrical shock and experienced pain in his arm. LOCATION OF ACCIDENT SITE Two miles from the Somerset city limits out Highway 769, RR 7, Box 95, Somerset, Kentucky. DESCRIPTION OF ACCIDENT Mr. Jeff Belcher was drilling holes with <u>a track</u> drill to blast a ditch for water lines. The drill bit contacted the underground 120V electric line. He received an electrical shock and was taken to the hospital. No request was <u>made to South Kentucky RECC to locate the underground electric</u> lines prior to the drilling. At the point of the accident, the buried underground electric line was 20 inches deep and at other

# ELECTRICAL UTILITY ACCIDENT INVESTIGATION (Continued)

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| points the depth ranged from 15 inches to 26 inches; however, the   |  |  |  |
|---|--|--|--|
| majority of the line was less than 20 inches deep.                  |  |  |  |
| SOURCE OF INFORMATION Jackson Denham of South Kentucky RECC,        |  |  |  |
| South Kentucky RECC's accident report and an on site investigation. |  |  |  |
| PROBABLE VIOLATIONS There was one probable violation of             |  |  |  |
| Commission Regulations involved in this accident. The burial        |  |  |  |
| depth of the conductor was 20 inches, resulting in probable         |  |  |  |
| violation of 807 KAR 5:041, Section 3(1), Acceptable Standards,     |  |  |  |
| which requires compliance with the NESC. The 1990 NESC, Section     |  |  |  |
| 353(D2), requires burial depth of underground conductors with less  |  |  |  |
| than 600V phase-to-phase to be 24 inches. It should be noted that   |  |  |  |
| this violation didn't contribute to the accident.                   |  |  |  |
| CORRECTIVE ACTION South Kentucky RECC indicated that the under-     |  |  |  |
| ground electric conductor is scheduled to be relocated along with   |  |  |  |
| some overhead electric conductors due to the construction of new    |  |  |  |
| roads in the area. The relocation of the electric lines is          |  |  |  |
| expected to be completed within 60 days from the date of the        |  |  |  |
| accident. South Kentucky should insure that the burial depth of     |  |  |  |
| the new underground conductors meet the 1990 NESC requirements.     |  |  |  |
| Voltage of line or facilities <u>120-240V</u>                       |  |  |  |
| Utility: South Kentucky RECC  |  |  |  |
| Date 8-5-94 Time 12:30 p.m.   |  |  |  |
| Measurements made by:   |  |  |  |
| Submitted by: Elis ET-Ronailel                                      |  |  |  |
| Page 2 of 2   |  |  |  |

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August 5, 1994

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Keith Sidan President and General Manager Phone (608) 878-4121

SOUTH KENTUCKY RURAL ELECTRIC

925-929 North Main Street P.O. Box 910 Somerset, Kentucky 42502-0910

RECEIVED

AUG O 8 1994 DIVISION OF UTILITY ENGINEERING & SERVICES

Martha M. Morton, P.E. Kentucky P.S.C. P.O. Box 615 Frankfort, Ky 40602

Martha,

Here is a <u>signed</u> copy of the Jeff Belcher accident report. I didn't sign the other one that I gave you when you were here.

Yours truly,

Vienhom

Jackson Denham Supervisor, Special Projects Engineering

JD/lr

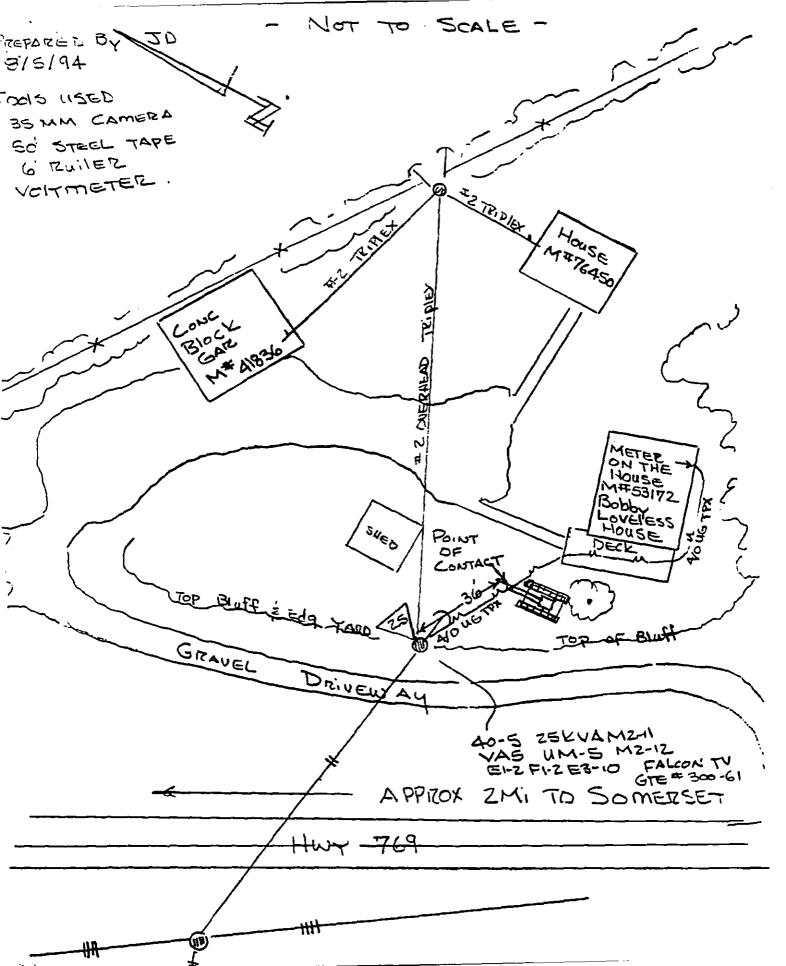
Enclosure

### INVESTIGATIVE REPORT PUBLIC ACCIDENT ELECTRICAL CONTACT

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| COOPERATIVE:         | Name SOUTH KENTUCKY RURAL ELECTRIC Telephone No. (606) 678-4121<br>COOPERATIVE CORPORATION |  |  |
|----------------------|--|--|--|
|                      | Address 925 N. MAIN ST., P.O. BOX 910, SOMERSET, KY 42502                                  |  |  |
| DATE OF<br>ACCIDENT: | 08/04/94 Approx. AM Cooperative<br>08/04/94 6:15 PM Notified 08/04/94 6:37 PM              |  |  |
| LOCATION:            | At the Bobby Loveless Residence - Two miles from the Somerset City Limits out              |  |  |
|                      | Highway 769 (Rush Branch Road) House up on the hill on the left at 7 mile                  |  |  |
|                      | marker.  |  |  |
| DESCRIPTION          |  |  |  |
| OF ACCIDENT:         | In the process of drilling holes to blast ditch for water line, Jeff Belcher               |  |  |
|                      | received an electric shock. When the track drill he was operating nicked the               |  |  |
|                      | insulation from and came in contact with a 120 Volt electric underground service           |  |  |
|                      | wire that runs from the transformer pole to the meter on the house.                        |  |  |
|                      | Name Address Telephone No. Occupation  |  |  |
| INJURED :            | 1. Jeff Belcher, 3712 Camelot Dr. Apt. 4, (606) 271-4310 Drill Operator (Rock              |  |  |
|                      | Lexington, KY 40517 Drill) on water line.  |  |  |
|                      |  |  |  |
| EXTENT OF<br>INJURY: | 1. Complained of his arm hurting after receiving electrical shock.                         |  |  |
|                      | Ambulance, Doctor, Hospital, Etc.  |  |  |
| TREATMENT:           | 911 Dispatched Rescue Squad - Took Jeff to Lake Cumberland Regional Hospital,              |  |  |
|                      | 305 Langdon St., Somerset - E.R. personnel reported they did a thorough                    |  |  |
|                      | examination and could find no injury, burn marks or anything and they released             |  |  |
|                      | him. Advised him to check with his family doctor if he had any future problem.             |  |  |
| COOPERATIVE          | Name Job Title   |  |  |
| EMPLOYEES AT         | Harlan Stout - Lead Serviceman   |  |  |
| SCENE:               | Rodney Jones - Serviceman 1st Class  |  |  |
|                      | Jackson Denham - Supervisor, Special Projects Engineering                                  |  |  |
|                      | Name Address Telephone No.   |  |  |
| witnesses:           |  |  |  |
|                      | BODBy Loveless RR7, Box 95, Somerset, Ky 42501 (606) 678-8254                              |  |  |
| LAW OR OTHER         |  |  |  |
| OFFICIALS            | None   |  |  |
| INVESTIGATING:       |  |  |  |
|                      |  |  |  |

| NEATHER AND   TERRAIN   CONDITIONS: Hot & Humid and threatening rain, However, the ground was   the accident site.   SYSTEM   Voltage-type & size conductor-type pole structures-etc.   PROFILE:   120 Volt Underground Service Wire - Direct Burial Triple   installed in a 4-inch black plastic drain pipe. This is   runs from the transformer pole to the meter on the hous   PROTECTIVE Type | ax Wire. The wire was<br>the service wire that<br>e.  |  |  |  |
|---|---|--|--|--|
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| runs from the transformer pole to the meter on the hous   | 8.  |  |  |  |
|   | <u></u>   |  |  |  |
| PROTECTIVE Type Location Rating   |   |  |  |  |
| PROTECTIVE Type Location Rating   |   |  |  |  |
|   | Did they operate?   |  |  |  |
| DEVICES Fuse at Transformer 3.5 Amp   | No  |  |  |  |
| DID OUTAGE Yes Date Time AM Durat   | ion   |  |  |  |
| OCCUR? (NO) / / PM  |   |  |  |  |
|   |   |  |  |  |
| WAS COOPERATIVE NO  |   |  |  |  |
| NOTIFIED OR AWARE   |   |  |  |  |
| OF WORK IN THE  |   |  |  |  |
| AREA - EXPLAIN:   |   |  |  |  |
|   |   |  |  |  |
| CLEARANCES: Prepare and attach a diagram. It need not be to scale but the measurements makes reduced because of the accident, measurement and photographs are needed condition. Document what caused the reduced clearance, such as broken pequipment, etc.   | d before returning to original  |  |  |  |
| CODE REQUIREMENTS   |   |  |  |  |
| FOR LINE IN   |   |  |  |  |
| QUESTION:   |   |  |  |  |
|   |   |  |  |  |
| AGENCY<br>INVOLVED: Antenna, auger, crane, construction equipment, etc. Give measurements, p<br>Describe any warning sign.  | Antenna, auger, crane, construction equipment, etc. Give measurements, make, model, or serial number.<br>Describe any warning sign. |  |  |  |
| Track Drill Machine - This machine drills a small diamete   | Track Drill Machine - This machine drills a small diameter hole (Approx. 1 1/2")  |  |  |  |
| into rock and hard ground enabling the placement of exp   | into rock and hard ground enabling the placement of explosive charges. The  |  |  |  |
| machine is mostly steel and is on steel tracks. It is   | machine is mostly steel and is on steel tracks. It is operated by standing on   |  |  |  |
| the ground beside the control levers.   |   |  |  |  |
|   |   |  |  |  |
| ADDITIONAL Bobby Loveless, the property owner where the accident or   | curred, is a contractor   |  |  |  |
| by trade, who does digging and earth work himself, came   |   |  |  |  |
| COMMENTS: where the existing water line and buried electric line  | where the existing water line and buried electric line is located. Jeff began   |  |  |  |
|   | digging a hole at a location away from the lines at the top of the bluff. When  |  |  |  |
|   | Bobby Loveless want into the house to get his shoes, Jeff moved the machine to  |  |  |  |
|   | directly over the electric line and drilled into it. When Bobby came back out   |  |  |  |
|   | of the house Jeff told Bobby he had found the electric line and received a shock  |  |  |  |
| and his arm hurt.   | 2   |  |  |  |
|   | ······································  |  |  |  |
| PREPARED BY: Incloson Denlam Projects Engineering 08/05/94 (<br>Job Title Date  | 606) 678-4121 Ext. 268<br>Telephone No.   |  |  |  |



IMAGES THROUGHOUT THIS ROLL OF FILM MAY BE ILLEGIBLE DUE TO THE POOR CONDITION OF THE ORIGNAL RECORDS. 8-5-94

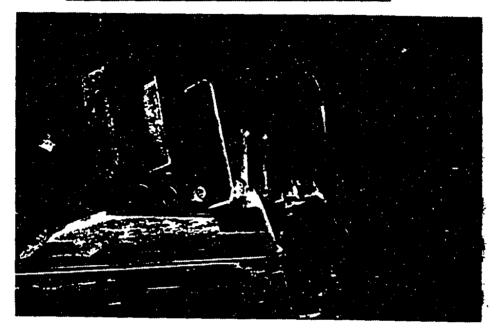
... I called Don Alexander to report this ... to him and came into office dispatch ... Conter.

I was not able to find out any information about condition of person in volved. AT 20:50 Donnie Bundine called P.S.C. to report what we had at that time.

... F called hospital at 21:40 and was told ...by emergency room that MP. Belchet had been ...checked and keleased at 21:00 houns. Thele ...checked and keleased at 21:00 houns. Thele ...che NO Visible burn manhes on skin and .all Vital signs were good. They had loged in he had received an electhical shock, was ok ...and released with instructions to see his ...tamily doctor if he has any problems in the next two or three days.

> Walter West Dispation Supervision For welk of 8-1-7 1494

### ATTACHMENT C



## PICTURES TAKEN AT THE ACCIDENT SITE



