COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

MOUNTAIN RURAL TELEPHONE
COOPERATIVE CORPORATION, INC. )

ALLEGED FAILURE TO COMPLY WITH ) CASE NO. 2012-00371
807 KAR 5:061 )

O R D E R

Mountain Rural Telephone Cooperative Corporation, Inc. ("Mountain Rural"), a Kentucky cooperative corporation organized under KRS Chapter 279 which engages in the transmission of messages by telephone for the public, for compensation, and in the provisioning of telecommunications services, is a utility subject to Commission jurisdiction.¹

Pursuant to KRS 278.280(2), which directs the Commission to prescribe rules and regulations for the performance of services by utilities, the Commission has promulgated administrative regulations establishing the proper conditions required for the safe and adequate furnishing of utility services. 807 KAR 5:061, Section 3(1), adopts the 1990 Edition of the National Electrical Safety Code ("NESC") as a standard of accepted good engineering practice for the construction and maintenance of plant and facilities.

¹ KRS 278.010(3)(e).
KRS 278.030 requires every utility to furnish adequate, efficient and reasonable service. KRS 278.260 permits the Commission, upon its own motion, to investigate any act or practice of a utility that affects or is related to the service of a utility. KRS 278.280(1) further permits the Commission, after conducting such investigation and finding that a practice is unreasonable, unsafe, improper, or inadequate, to determine the reasonable, safe, proper, or adequate practice or methods to be observed and to fix same by Order.

Commission Staff submitted to the Commission an Incident Investigation Report ("Report") regarding this incident, which is attached as an Appendix to this Order. The Report alleges that on April 17, 2012, at Highway 1812 and Hurst Lane in Wolfe County, Kentucky, Ryan Rose, an employee of R & L Contracting, Inc. ("R & L"), a contractor for Mountain Rural, sustained injuries as a result of an incident while attempting to raise the height of a telephone service drop on a Licking Valley Rural Electric Cooperative Corporation ("Licking Valley") service pole.

According to the Report, on the day of the incident, the victim climbed the Licking Valley service pole to raise a telephone service drop attached to the pole. When Mr. Rose released the tension of the telephone service drop, the pole fell while he was still attached to it. Larry Sapp, Superintendent for R & L, was nearby when the incident occurred. Mr. Sapp stated that Mr. Rose was still belted to the pole when the pole fell and his head was partially in the creek. Mr. Sapp also stated that Mr. Rose was unresponsive for approximately two minutes.

According to the Report, it appears that the Licking Valley service pole was located on the edge of a creek bank and the earth around the base of the pole had been

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eroded on the side closest to the creek. There was no evidence of disturbed earth at the base of the pole. It also appears that at the time of the incident, the pole was not buried very deep on the creek side of the pole, and the pole was being supported by the attached electric conductors, guy wires, and the telephone service drop cable.

According to Mountain Rural’s report and the statement of Mr. Sapp, the pole was sitting on a small creek bank, and from the moisture/mud on the end of the pole, it looked like the creek had washed out around the pole and the pole was only sticking about 21 inches into the ground. It appeared that when Mr. Rose cut the pclamp it caused the pole to fall. It was noted from the hook marks that Mr. Rose had climbed approximately two-thirds of the way up the pole when it fell into the creek. It appears Mr. Rose was kept overnight in the hospital for observation when tests revealed Mr. Rose had blood between his brain and his skull. Mr. Rose was released the next day.

Based on Commission Staff’s investigation of the incident, information contained in the Report, and the information provided by Mountain Rural in its seven-day summary report (Attachment B to the Report), Commission Staff alleges that Mountain Rural has violated the following provisions of the NESC:

   1. The employer shall inform each employee working on or about communications equipment or electric-supply equipment and the associated lines, of the safety rules governing the employee’s conduct while so engaged. When deemed necessary, the employer shall provide a copy of such rules.

2. 1990 NESC Section 41, Rule 411.A.3—Rules for the Operation of Electric-Supply and Communications Lines and
Equipment—Supply and Communications Systems—Rules for Employers—Methods

3. Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.

3. 1990 NESC Section 42, Rule 421.A—Duties of a first-level supervisor or person in charge—this individual shall:
   1. Adopt such precautions as are within the individual’s authority to prevent accidents.
   2. See that safety rules and operating procedures are observed by the employee under the direction of this individual.
   3. Make all necessary records and reports, as required.

   1. Before climbing poles, ladders, scaffolds, or other elevated structures, employees shall determine, to the extent practical, that the structures are capable of sustaining the additional or unbalanced stresses to which they will be subjected.
   2. Where there are indications that poles and structures may be unsafe for climbing, they shall not be climbed until made safe by guying, bracing, or other means.

Based on its review of the Report and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that Mountain Rural has failed to comply with 807 KAR 5:061. We further find that a formal investigation into the incident that is the subject matter of the Report should be conducted and that this investigation should also examine the adequacy, safety, and reasonableness of Mountain Rural’s practices related to the construction, installation, and repair of utility facilities.

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

1. Mountain Rural shall submit to the Commission, within 20 days of the date of this Order, a written response to the allegations contained in the Report.
2. Mountain Rural shall appear on January 15, 2013, at 10:00 a.m., Eastern Standard Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard in Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of 807 KAR 5:061 and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

3. At the scheduled hearing in this matter, Mountain Rural shall also present evidence on the adequacy, safety, and reasonableness of its practices related to the construction, installation, and repair of utility facilities and whether such practices require revision as related to this incident.

4. The January 15, 2013 hearing shall be recorded by videotape only.

5. The Report in the Appendix to this Order is made a part of the record in this case.

6. Any requests for an informal conference with Commission Staff shall be set forth in writing and filed with the Commission within 20 days of the date of this Order.

By the Commission

Case No. 2012-00371
APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2012-00371 DATED SEP 10 2012
ACCIDENT INVESTIGATION - Staff Report

Report Date: June 7, 2012

Utility: Mountain Rural Telephone Cooperative Corporation, Inc.

Accident Date: April 17, 2012

Accident Location: HWY 1812/Hurst Lane Junction in Wolfe County, Kentucky

Victim: Mr. Ryan Rose

PSC Investigator: Mr. Scott Morris
Section 1-A: Investigation – Contacts/Actions

Utility: Mountain Rural Telephone Cooperative Corporation, Inc.
Date: 4-18-12
PSC Staff Member: Scott Morris
Contact Name: Rick Pelfrey – Outside Plant Manager
Contact Address: Mountain Rural Telephone Cooperative Corporation, Inc.
405 Main Street P.O. Box 399 West Liberty, KY 41472-0399
Contact Telephone: 606-743-3121
Summary of Conversation/Action: Discussion of this accident.

Utility: Mountain Rural Telephone Cooperative Corporation, Inc.
Date: 4-18-12
PSC Staff Member: Scott Morris
Contact Name: Teresa Brown Litteral – Human Resource & Safety Director
Contact Address: Mountain Rural Telephone Cooperative Corporation, Inc.
405 Main Street P.O. Box 399 West Liberty, KY 41472-0399
Contact Telephone: 606-743-3121
Summary of Conversation/Action: Discussion of this accident and provided summary report.
Utility: R&L Contracting, Inc.

Date: 4-18-12

PSC Staff Member: Scott Morris

Contact Name: Larry Sapp – Superintendent

Contact Address: 610 West Columbia Avenue, Ste. 2, Monticello, Kentucky 42633

Contact Telephone: 606-348-0898

Summary of Conversation/Action: Discussion of this accident and provided written statement.

Utility: R&L Contracting, Inc.

Date: 4-18-12

PSC Staff Member: Scott Morris

Contact Name: Roger Upchurch - Owner

Contact Address: 610 West Columbia Avenue, Ste. 2, Monticello, Kentucky 42633

Contact Telephone: 606-348-0898

Summary of Conversation/Action: Discussion of this accident.

Utility: Licking Valley Rural Electric Cooperative Corporation

Date: 4-18-12

PSC Staff Member: Scott Morris

Contact Name: Tommy Conley – Superintendent of Operations

Contact Address: P.O. Box 605, 271 Main Street, West Liberty, Kentucky 41472

Contact Telephone: 606-743-3179

Summary of Conversation/Action: Discussion of this accident.
Utility: Kentucky Public Service Commission

Date: 4-18-12

PSC Staff Member: Scott Morris

Contact Name: Steve Kingsolver – Regulatory & Safety Investigator

Contact Address: 211 Sower Boulevard, Frankfort, Kentucky 40602

Contact Telephone: 502-564-3940

Summary of Conversation/Action: Discussion of this accident.

Section 1-B: INVESTIGATION – SUPPORTING INFORMATION

See Investigator’s Report (Attachment A)
SECTION II: FINDINGS

The accident investigation performed on April 18, 2012 revealed that the Licking Valley RECC service pole that fell while Ryan Rose was working on it was located on the edge of a creek bank, and the earth around the base of the pole closest to the creek had been eroded at the base of the pole. Mountain Rural Telephone requires the Contractor to comply with rules and regulations pertaining to the construction of the Project in the contract between Mountain Rural Telephone and R & L Contracting. (Attachment E Section 9 – page 127).


The person(s) in charge were nearby at the time of the accident as described in the written statement by R&L Contracting Superintendent Larry Sapp. Mr. Sapp stated in interviews that he and the R&L Contracting Foreman Paul Burnett were approximately 125 feet away from Ryan Rose when the accident occurred.

2. The Code describes duties of a first level supervisor or a person in charge in Part 4, Section 42. 421 A(1)(2)(3) page 366. Some of the duties the Code requires of person in charge are to adopt precautions as are within his authority to prevent accidents, see that the safety rules and operating procedures are observed by the employees under their direction, and make all the necessary records and reports. The Code describes employer obligations to inform each employee who works on communications equipment and associated lines of the safety rules governing the employees conduct in Part 4, Section 41. 410. A(1) pages 359-360.

3. R&L Contracting did not have a documented job briefing for the work being performed. The Code describes that employees shall be instructed as to the character of the equipment or lines and methods to be used before any work in undertaken in Part 4, Section 41. 411. A(3) page 361.
SECTION III: RELEVANT CODES, STATUTES, REGULATIONS, OR SAFETY MANUAL ISSUES THAT ARE PERTINENT TO THE INVESTIGATION

Mountain Telephone contract with R & L Contracting
Article IV – PARTICULAR UNDERTAKINGS OF THE CONTRACTOR
Section 9. Compliance with Statutes and Regulations – Page 127

The Contractor shall comply with all applicable statutes, ordinances, rules, and regulations pertaining to the construction of the Project.

Part 4. Rules for the Operation of Electric-Supply and Communications Lines and Equipment
Section 42. General – Rules for Employees
422. Overhead Line Operating Procedures
B. Checking Structures Before Climbing (1),(2) – Page 368

1. Before Climbing poles, ladders, scaffolds, or other elevated structures, employees shall determine, to the extent practical, that the structures are capable of sustaining the additional or unbalanced stresses to which they will be subjected.

2. Where there are indications that poles and structures may be unsafe for climbing, they shall not be climbed until made safe by guying, bracing, or other means.

Part 4. Rules for the Operation of Electric-Supply and Communications Lines and Equipment
Section 42. General – Rules for Employees
421. General Operating Routines
A. Duties of a First Level Supervisor or Person in Charge
(1),(2),(3) – Page 366

1. Adopt such precautions as are within the individual’s authority to prevent accidents.

2. See that the safety rules and operating procedures are observed by the employees under the direction of this individual.

3. Make all necessary records and reports, as required.
1. The employer shall inform each employee working on or about communications equipment or electric-supply equipment and the associated lines, of the safety rules governing the employee's conduct while so engaged. When deemed necessary, the employer shall provide a copy of such rules.

3. Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken.

SECTION IV: NOTIFICATION FROM THE UTILITY

The utility stated in the summary report that they had received notification about the accident at approximately 4:30 PM on April 17, 2012, and that they were notified that the victim was admitted in the hospital for observation at about 8:30 AM on April 18, 2012. This investigator spoke with utility representatives about the accident by phone at approximately 7:00 AM on April 18, 2012. (See Description).
Investigated By: Scott Morris
Company: Kentucky Public Service Commission

Utility Regulatory and Safety Investigator - Telephone

Signed: [Signature]
Date: 6-7-12

Attachments:
A. PSC Investigator Report
B. Utility Summary Report – R&L Contracting employee - Ryan Rose Accident
C. Written Statement from R&L Superintendent Larry Sapp – Ryan Rose Accident
D. PSC Photographs of site of Accident – R&L Contracting employee Ryan Rose Accident
E. Mountain Telephone contract with R & L Contracting
   Article IV – PARTICULAR UNDERTAKINGS OF THE CONTRACTOR
   Section 9. Compliance with Statutes and Regulations – Page 127
   Part 4. Section 42. General – Rules for Employees
   422. Overhead Line Operating Procedures
   B. Checking Structures Before Climbing (1),(2) – Page 368
   Part 4. Section 42. General – Rules for Employees
   421. General Operating Routines
   A. Duties of a First Level Supervisor or Person in Charge
      (1),(2),(3) – Page 366
   410. General Requirements
   A. General (1) – Pages - 359-360
   411. Protective Methods and Devices
   A. Methods (3) – Page 361
## Attachment A

**COMMONWEALTH OF KENTUCKY**  
**PUBLIC SERVICE COMMISSION**  
**PSC Investigator Report**

June 7, 2012

### BRIEF

<table>
<thead>
<tr>
<th>Name of Utility:</th>
<th>Mountain Rural Telephone Cooperative Corporation, Inc.</th>
</tr>
</thead>
</table>
| Utility Address: | Mountain Rural Telephone Cooperative Corporation, Inc.  
405 Main Street P.O. Box 399 West Liberty, KY 41472-0399 |
| Type of Utility: | Incumbent Local Exchange Carrier |
| Inspector(s):   | Scott Morris |
| Date and Time of Incident: | April 17, 2012 Approximately 3:45 PM E.S.T. |
| Accident Location: | HWY 1812 / Hurst Lane Junction in Wolfe County |
| Date and Time Commission Notified: | The utility stated in the summary report that they had received notification about the accident at approximately 4:30 PM on April 17, 2012, and that they were notified that the victim was admitted in the hospital for observation at about 8:30 AM on April 18, 2012. This investigator spoke with utility representatives about the accident by phone at approximately 7:00 AM on April 18, 2012. (See Description). |
| PSC Investigated: | April 18, 2012 Approximately 9:00 AM EST |
| Summary Report Received: | April 23, 2012 |
| Type of Incident: | Injury to R&L Contracting employee Ryan Rose |
Incident Description:

Victim's Name: Ryan Rose  
Age: 21  
Injuries: Head

Information From:  
Teresa Litteral  
Rick Pelfrey  
Larry Sapp  
Roger Upchurch  
Tommy Conley  
Steve Kingsolver  

Position:  
HR & Safety Director  
Outside Plant Manager  
Superintendent  
Owner  
Super. of Operations  

Employer:  
Mountain Rural Telephone  
R&L Contracting  
R&L Contracting  
R&L Contracting  
Licking Valley RECC  
Public Service Commission

Employer: R&L Contracting

Description:

On April 17, 2012 I received a call at 7:52 PM E.S.T from Steve Kingsolver, Electric Inspector for the KYPSC. Mr. Kingsolver informed me that he received an e-mail notification on April 17th at 5:39 PM from Licking Valley RECC that a contractor working for Mountain Rural Telephone was taken to the Kentucky River Medical Center in Breathitt County, after climbing a Licking Valley RECC pole and it fell with him. The notification also mentioned that the Licking Valley RECC Superintendent of Operations, Tommy Conley, did go to the accident location and was in route to the hospital. After receiving the e-mail notification, Mr. Kingsolver called Tommy Conley at approximately 6:30 PM and learned that the victim had not been admitted to the hospital. Mr. Kingsolver advised Mr. Conley to let him know if the victim was admitted. At approximately 7:30 PM on April 17th, Mr. Kingsolver received a call back from Mr. Conley reporting that the victim was admitted to the hospital. It was reported that tests revealed the victim had blood between the brain and the skull. The victim, Ryan Rose, was working for R&L Contracting, who was working for Mountain Rural Telephone at the time of the accident, according the information provided by Licking Valley RECC. Mr. Kingsolver called the PSC Manager of the Electric/Communications Branch, Eric Bowman, to find out information on Mountain Rural Telephone. Mr. Kingsolver then called me at 7:52 PM E.S.T. on April 17, 2012, and gave me the information he had on the accident. I agreed to accompany Mr. Kingsolver to the scene of the accident to perform an investigation on April 18th.

I called Mountain Rural Telephone's Outside Plant Manager, Rick Pelfrey, at approximately 7:00 AM the morning of Wednesday, April 18th and confirmed the accident had occurred. Mr. Pelfrey agreed to meet Steve Kingsolver and me at the scene of the accident on April 18th. Information from the investigation and information provided by the R&L Contracting Superintendent, Larry Sapp, Licking Valley RECC Superintendent of Operations, Tommy Conley, Mountain Rural Telephone Outside Plant Manager, Rick Pelfrey, Mountain Rural Telephone HR & Safety Director, Teresa Litteral, and summary reports from Mountain Rural Telephone, the following is a description of what took place:
On Wednesday, April 17, 2012 at approximately 3:45 PM, Ryan Rose, employee of R&L Contracting, was working for Mountain Rural Telephone behind the old Greyhound Bus Station on Highway 1812 in Wolfe County, Kentucky. Mr. Rose climbed a Licking Valley RECC service pole to raise the height of a telephone service drop attached to the pole. When Mr. Rose released the tension of the telephone service drop, the pole fell while he was on it.

Larry Sapp, superintendent for R&L Contracting, was nearby when the accident occurred. Mr. Sapp stated that the foreman was standing close to Mr. Rose and that the foreman ran to assist Mr. Rose. Mr. Sapp stated that Mr. Rose was still belted to the pole, was unresponsive for approximately two minutes, and his head was partially in the creek. Mr. Sapp stated that he and other R&L contractors present un-belted Mr. Rose from the pole and pulled his head out of the creek. Mr. Sapp stated the victim was not alert and unresponsive for approximately two minutes. An ambulance arrived approximately 30 minutes later, and Mr. Rose was transported to the Kentucky River Medical Center in Breathitt County, Kentucky, where he stayed overnight for observation and was released the next day.

From the investigation at the scene of the accident on April 18, 2012, it appears that the Licking Valley RECC service pole was located on the edge of a creek bank and the earth around the base of the pole had been eroded on the side closest to the creek. There was no evidence of disturbed earth at the base of the pole. It also appears that at the time Mr. Rose climbed the pole on April 17, the pole was not buried very deep on the creek side of the pole, and the pole was being supported by the attached electric conductors, guy wires, and a telephone service drop cable.

During the investigation, representatives from Mountain Rural Telephone informed me about another accident involving a utility employee who had sustained head injuries and required overnight hospitalization that occurred on April 4, 2012. I informed Teresa Litteral and Rick Pelfrey that the accident should have been reported to the Commission within two hours of discovery of the accident, per 807 KAR 5:006, Section 26. I gave Teresa Litteral the most recent version of the PSC contact list for reporting accidents and outages and requested that the utility provide a summary report of the accident within seven days. This accident will be addressed in a separate accident report.
4/20/2012

Summary Written Report for Ryan Rose with R & L Construction

I was notified Wednesday, April 18, about 8:30 am of incident with R & L Contracting by Allen Gillium, General Manager. R & L had an accident while working on telephone drop on HWY 1812 in Wolfe County at the old greyhound bus station the day before. Allen told me that Rick Pelfrey (Outside Plant Manager) had been notified about 4:30 pm the day before, April 17. Allen and I (Teresa Litteral) HR & Safety Director agreed that I should accompany Rick to the site to conduct an accident investigation and meet with LVRECC Tommy Conley and the Public Service Commission, Scott Morris.

Rick and I determined that it looked like Ryan Rose had climbed a power service pole to raise a copper telephone drop. The pole was sitting on a small creek bank, it looked like from the moisture/mud on the end of the pole that the creek had washed out around the pole and the pole was only sticking about 21 inches into the ground. It looked like when Ryan cut the pclamp was when the pole fell with him. It was noted that from the hook marks on pole that Ryan had climbed about 2/3 way up the pole when it fell across creek knocking Ryan off, into the creek.

I had questioned Larry Sapp, R & L superintendent when doing labor standards interviews in the field Aug 30, 2011 if they conducted safety meetings and was informed that they did do them.

It is my understanding that Ryan spent one night in the hospital for observation and was release the next day and he has returned to work.

Teresa Litteral
HR & Safety Director
Mountain Telephone
Attachment C

Written Statement from R&L Contracting Superintendent Larry Sapp
We were working on hwy 1812 behind the greyhound bus station. The incident took place at approximately 3:45 p.m. The said person Mr Ryan Rose climbed a power service pole to raise a copper telephone drop. As soon as said person started to raise drop, the pole fell. The foreman standing close by and run to him. He was not alert. He was out of breath. He was approximately un alert for 2 minutes. His breath was knocked out of him. Responisve started comin back, it was talkin to everyone around him. The ambulance arrived approximately 30 minutes later, then said person walked to ambulance. He was then transported to Jackson, Ky hospital.

April 17th 2012

Signature

Superintendent
R & L Contracting
Attachment D

KPSC Photographs 1-8
Attachment E

Mountain Telephone contract with R & L Contracting
Article IV – PARTICULAR UNDERTAKINGS OF THE CONTRACTOR
Section 9. Compliance with Statutes and Regulations – Page 127
When checked by the Owner, with respect to the insurance required by 7 CFR part 1788, Subpart C, the Contractor shall include as co-insured the Owner, and their personnel, and the Engineer and their personnel. The added costs shall be included in the bid price.

The Owner shall have the right to require public liability insurance and property damage liability insurance in an amount greater than those required in 7 CFR Part 1788, Subpart C. The added costs shall be included in the bid price.

Upon request by the Administrator, the Contractor shall furnish to the Administrator a certificate in such form as the Administrator may prescribe, evidencing compliance with the foregoing requirements. (See 7 CFR part 1788.55)

Section 5. Purchase of Materials.

The Contractor shall purchase all materials and supplies outright and not subject to any conditional sales agreement, bailment lease, or other agreement reserving to the seller any right, title, or interest therein. All materials and supplies shall become the property of the Owner upon acceptance.

Section 6. Assignment of Guarantees.

All guarantees of materials and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner upon completion of construction and at such time as the Contractor receives final payment.

Section 7. Patent Infringement.

The Contractor shall save harmless and indemnify the Owner from any and all claims, suits and proceedings for the infringement of any patent or patents covering any materials or equipment used in construction of the Project.

Section 8. Permits for Explosives.

All permits necessary for the handling or use of dynamite or other explosives in connection with the construction of the Project shall be obtained by and at the expense of the Contractor.

Section 9. Compliance with Statutes and Regulations.

The Contractor shall comply with all applicable statutes, ordinances, rules, and regulations pertaining to the construction of the Project.
Part 4. Section 42. General – Rules for Employees
422. Overhead Line Operating Procedures
B. Checking Structures Before Climbing (1), (2) – Page 368
422. Overhead Line Operating Procedures

Employees working on or with overhead lines shall observe the following rules in addition to applicable rules contained elsewhere in Sections 43 and 44.

A. Setting, Moving, or Removing Poles In or Near Energized Electric Supply Lines

1. When setting, moving, or removing poles in or in the vicinity of energized lines, precautions shall be taken to avoid direct contact of the pole with the energized conductors. Employees shall wear suitable insulating gloves or use other suitable means where voltages may exceed rating of gloves in handling poles where conductors energized at potentials above 750 V can be contacted. Employees performing such work shall not contact the pole with uninsulated parts of their bodies.

2. Contact with 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.

B. Checking Structures Before Climbing

1. Before climbing poles, ladders, scaffolds, or other elevated structures, employees shall determine to the extent practical, that the structures are capable of sustaining the additional or unbalanced stresses to which they will be subjected.

2. Where there are indications that poles and structures may be unsafe for climbing, they shall not be climbed until made safe by guying, bracing, or other means.

C. Installing and Removing Wires or Cables

1. Precautions shall be taken to prevent wires or cables being installed or removed from contacting energized wires or equipment. Wires or cables which are not bonded to an effective ground and are being installed or removed in the vicinity of energized conductors shall be considered as being energized.

2. Sag of wire or cables being installed or removed shall be controlled to prevent danger to pedestrian and vehicular traffic.

423. Underground Line Operating Procedures

Employees working on or with underground lines shall observe the following rules in addition to applicable rules contained elsewhere in Sections 43 and 44.

A. Guarding Manhole and Street Openings

When covers of manholes, handholes, or vaults are removed, the opening shall be promptly protected with a barrier, temporary cover, or other suitable guard.

B. Testing for Gas in Manholes and Unventilated Vaults

1. The atmosphere shall be tested for combustible or flammable gas(es) before entry.

2. Where combustible or flammable gas(es) are detected, the work area shall be ventilated and made safe before entry.

3. Unless forced continuous ventilation is provided, a test shall also be made for oxygen deficiency.

4. Provision shall be made for an adequate continuous supply of air.

NOTE: The term adequate includes evaluation of both the quantity and quality of the air.

C. Flames

1. Employees shall not smoke in manholes.

2. Where open flames must be used in manholes or vaults, extra precautions shall be taken to ensure adequate ventilation.
Attachment G

Part 4. Section 42. General – Rules for Employees
421. General Operating Routine
A. Duties of a First Level Supervisor or Person in Charge
(1),(2),(3) – Page 366
N. Fuses
When fuses must be installed or removed with one or both terminals energized, employees shall use special tools or gloves insulated for the voltage involved. When installing expulsion-type fuses, employees shall wear personal eye protection and take precautions to stand clear of the exhaust path of the fuse barrel.

O. Cable Reels
Cable reels shall be securely blocked so they cannot roll or rotate accidentally.

P. Street and Area Lighting
1. The lowering rope or chain, its supports, and fastenings shall be examined periodically.
2. A suitable device shall be provided by which each lamp on series lighting circuits of more than 300 volts may be safely disconnected from the circuit before the lamp is handled.
   EXCEPTION: This rule does not apply where the lamps are always worked on from suitable insulated platforms or aerial lift devices, or handled with suitable insulated tools, and treated as under full voltage of the circuit concerned.

421. General Operating Routines
A. Duties of a First Level Supervisor or Person in Charge
   This individual shall:
   1. Adopt such precautions as are within the individual's authority to prevent accidents.
   2. See that the safety rules and operating procedures are observed by the employees under the direction of this individual.
   3. Make all the necessary records and reports, as required.
   4. Prevent unauthorized persons from approaching places where work is being done, as far as practical.
   5. Prohibit the use of tools or devices unsuited to the work at hand, or which have not been tested or inspected as required.

B. Area Protection
   1. Areas Accessible to Vehicular and Pedestrian Traffic
      a. Before engaging in work that may endanger the public, warning signs or traffic control devices, or both, shall be placed conspicuously to alert approaching traffic. Where further protection is needed, suitable barrier guards shall be erected. Where the nature of work and traffic requires it, a person shall be stationed to warn traffic while the hazard exists.
      b. When openings or obstructions in the street, sidewalk, walkways, or on private property are being worked on or left unattended during the day, danger signals, such as warning signs and flags, shall be effectively displayed. Under these same conditions at night, warning lights shall be prominently displayed and excavations shall be enclosed with protective barricades.
   2. Aareas Accessible to Employees Only
      a. If the work exposes energized or moving parts that are normally protected, danger signs shall be displayed. Suitable barricades shall be erected to restrict other personnel from entering the area.
      b. When working in one section where there is a multiplicity of such sections, such as one panel of a switchboard, one compartment of several, or one portion of a substation, employees shall mark the work area conspicuously and place barriers to prevent accidental contact with energized parts in that section or adjacent sections.
   3. Locations with Crossed or Fallen Wires
      An employee, finding crossed or fallen wires that are creating, or may create a hazard, shall remain on guard or adopt other adequate means to prevent accidents. The proper authority shall be notified. If the employee is qualified, and can observe the rules for safely handling energized parts by the use of insulating equipment, the employee may correct the condition.

C. Escort
   Persons accompanying non-qualified employees or visitors in the vicinity of electric equipment or lines shall be qualified to safeguard the people in their care, and see that the safety rules are observed.
Attachment H

410. General Requirements
A. General (1) – Pages - 359-360
PART 4. Rules for the Operation of Electric-Supply and Communications Lines and Equipment

Section 40. Purpose and Scope

400. Purpose
The purpose of Part 4 of this code is to provide practical work rules as one of the means of safeguarding employees and the public from injury.

401. Scope
Part 4 of this code covers work rules to be followed in the installation, operation, and maintenance of electric supply and communication systems.

402. Referenced Sections
The Introduction (Section 1), Definitions (Section 2), References (Section 3), and Grounding Methods (Section 9) of this code shall apply to the requirements of Part 4.

The American National Standards listed in Section 3 shall be used with Part 4 where applicable.

NOTE: After ANSI C2.4-1973 was originally approved June 30, 1972, OSHA (Occupational Safety and Health Administration) issued 29CFR1928 Subpart V applying to employee safety in construction. The revisions in the 1990 edition of the National Electrical Safety Code (ANSI C2-1990) did not address the differences. Footnotes have been provided in the text where OSHA requirements conflict with ANSI C2-1990 requirements.

Section 41. Supply and Communications Systems—Rules for Employers

410. General Requirements
A. General
1. The employer shall inform each employee working on or about communications equipment or electric-supply equipment and the associated lines, of the safety rules governing the employee's conduct while so engaged.

Work Rules

410A1

When deemed necessary, the employer shall provide a copy of such rules.

2. Employers shall utilize positive procedures to secure compliance with these rules. Cases may arise, however, where the strict enforcement of some particular rule could seriously impede the safe progress of the work at hand; in such cases the employee in charge of the work to be done should make such temporary modification of the rules as will accomplish the work without increasing the hazard.

3. If a difference of opinion arises with respect to the application of these rules, the decision of the employer or his authorized agent shall be final. This decision shall not result in any employee performing work in a manner which is unduly hazardous to the employee or to the employee's fellow workers.

B. Emergency Procedures and First Aid Rules
1. Employees shall be informed of procedures to be followed in case of emergencies and rules for first aid, including approved methods of resuscitation. Copies of such procedures and rules should be kept in conspicuous locations in vehicles and places where the number of employees and the nature of the work warrants.

2. Employees working on communications or electric-supply equipment or lines shall be regularly instructed in methods of first aid and emergency procedures, if their duties warrant such training.

C. Responsibility
1. A designated person shall be in charge of the operation of the equipment and lines and shall be responsible for their safe operation.

2. If more than one person is engaged in work on or about the same equipment or line, one person shall be designated as in charge of the work to be performed. Where there are separate work locations one person may be designated at each location.

411. Protective Methods and Devices
A. Methods
1. Access to rotating or energized equipment shall be restricted to authorized personnel.
Attachment I

Part 4. Section 41. Supply and Communications Systems —
Rules for Employers
411. Protective Methods and Devices
A. Methods (3) – Page 361
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C. Responsibility
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2. If more than one person is engaged in work on or about the same equipment or line, one person shall be designated as in charge of the work to be performed. Where there are separate work locations one person may be designated at each location.

411. Protective Methods and Devices

A. Methods
1. Access to rotating or energized equipment shall be restricted to authorized personnel.

2. Diagrams, showing plainly the arrangement and location of the electric-supply equipment and lines, shall be maintained on file and readily available to authorized personnel for that portion of the system for which they are responsible.

3. Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.

4. Employees should be instructed to take additional precautions to ensure their safety when conditions create unusual hazards.

B. Devices and Equipment
An adequate supply of protective devices and equipment, sufficient to enable employees to meet the requirements of the work to be undertaken, and first aid equipment and materials shall be available in readily accessible and, where practical, conspicuous places.

Protective devices and equipment shall conform to the applicable standards listed in Section 3.

NOTE: The following is a list of some common protective devices and equipment, the number and kinds of which will depend upon the requirements of each case:

1. Insulating wearing apparel such as rubber gloves, rubber sleeves, and headgear
2. Insulating shields, covers, mats, and platforms
3. Insulating tools for handling or testing energized equipment or lines
4. Protective goggles
5. Person at work tags, portable danger signs, traffic cones, and flashers
6. Body belts and safety straps
7. Fire extinguishing equipment designed for safe use on energized parts or plainly marked that they must not be so used
8. Protective grounding materials and devices
9. Portable lighting equipment
10. First aid equipment and materials

C. Inspection and Testing of Protective Devices
1. Protective devices and equipment shall be inspected or tested to ensure that they are in safe working condition.

2. Insulating gloves, sleeves, and blankets shall be inspected before use. Insulating gloves and sleeves shall be tested as frequently as their use requires.