

# PART ONE

## BASIC PRACTICES FOR ELECTRICAL SAFETY

### CHAPTER 1

#### PURPOSE AND APPLICABILITY

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##### 1-1. Purpose

The purpose of this manual is to provide basic safety rules and instructions pertinent to electrical work in order to assist electrical workers in eliminating situations, practices and actions which can result in accidents to personnel and property. Safety hazards exist in any workplace. The risks of injury from unsafe handling of energy from electrical systems have increased considerably in the past few decades for personnel involved in operating and maintaining electrical facilities. This safety manual was developed to meet the need for consistent and effective safety standards for electrical workers.

*a. Accident prevention.* Accidents do not just happen. Accidents are normally caused by the careless and thoughtless acts of workers. Using damaged tools or unsafe equipment or working inside unprotected environments are the main causes of accidents. Accident prevention is the responsibility of all workers. Your own safety, your co-workers' safety, and your community's safety depend upon your safe working practices, safe working procedures, and good personal protection.

*b. Safe working practices.* A copy of this safety manual will be given to each electrical worker. Each worker will be required to learn and become accustomed to the safe working practices recommended in this manual. Supervisors and foremen have the responsibilities to interpret the safety rules listed in the manual to their workers. A comprehensive test will be given to each worker. Any worker who fails to make a passing grade on the test will be restricted in the type of work permitted.

*c. Safe working procedures.* A working procedure must be prepared by the appropriate supervisor or foreman for each job. It includes the detailed instructions on how the job needs to be done. The worker has the responsibilities to follow the instructions in the procedure carefully step by step. However, the workers have the right to discuss the working procedures with their supervisor or foreman in case where they feel that the instructions are not clear or where safety is not adequate.

*d. Personal protections.* All electrical workers are required to use appropriate protective equipment such as hard hats, rubber gloves, gas masks, and goggles when exercising their jobs. Workers must also learn how to visually inspect and test their personal protective equipment. All unsafe protective equipment must be isolated, tagged, repaired, or discarded.

*e. Training.* All electrical workers must be trained, certified, and current in American Red Cross or American Heart Association cardiopulmonary resuscitation (CPR) and first aid.

##### 1-2. Applicability

This manual is applicable to all U.S. Army facilities engineering electrical workers including military and civilian. Where the working conditions or job requirements are not covered by this manual, appropriate references listed in appendix A will apply.

*a. Mandatory.* The safety rules in this manual are mandatory for all U.S. Army electrical workers, including supervisors, foremen, linemen, and other crew members. Electrical workers have the right to ask questions if the safety instructions are not adequate or clear. Supervisors and foremen have the duty to interpret the safety rules for their workers. Supervisors and foremen will discuss the safety rules and procedures with his/her crew when it is necessary.

*b. Emergency conditions.* Under emergency conditions, supervisors and foremen may alter some safety procedures. However, they should discuss the alternative procedures with their workers and should be present at the scene all the time. Workers are not allowed to perform any work that they are not qualified for or where their personal protection is not adequate.

*c. Documentation.* Whenever a safety procedure is altered, an emergency written report should be prepared and documented. The report will describe the alternative method and the personal protection used for the job.

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### **1-3. References.**

Required and related publication and proscribed forms are listed in appendix A.

