

Foreword

The NECA's *Guidelines for Electrical Safety Work Practices* has been designed to help electrical contractors to develop and implement their own Company project electrical safety program. This 2002 edition includes changes in the NEC 2002 Code and other minor improvements.

Electrical construction personnel, who will find the guidelines most useful, are Company Owners, Site Superintendents, Foremen, Site Safety Coordinators, and Employees.

These guidelines can be used by electrical contractors to:

- Comply with the Customer's project electrical safety contractual requirements.
- Comply with applicable OSHA 1910 & 1926, and National Consensus Electrical Safety Standards.
- Provide a standardized electrical safety procedures format for all Company job sites.
- Help safeguard employees installing, upgrading, testing, and starting-up electrical systems.

Section 2 - States the major objectives for the Company's electrical safety program.

Section 3 - Describes the various electrical safety national consensus standards.

Section 4 - Lists OSHA electrical safety standards, multi-employer citation policy, and cross references

Section 5 - Discusses the Customer's and Company's project's electrical safety requirements.

Section 6 - Defines the types of electrical hazards.

Section 7 - Addresses work site access control requirements.

Section 8 - Lists sample job task electrical safe work procedures.

Section 9 - Provides safety and code requirements for hazardous (classified) locations.

Section 10 - Explains the typical requirements for personal protective equipment.

Section 11 - Lists rubber protection equipment standards.

Section 12 - Outlines electrical safety training programs and provides sample electrical safety records.

Section 13 - Offers action plans for electrical accident rescue and emergency response.

Section 14 - Supplies eight exhibits.

- 14.1 NECA's List of Safety Publications.
- 14.2 National Electrical Installation Standards.
- 14.3 Glossary of OSHA Standard Electrical Terms.
- 14.4 OSHA Citations for Electrical Contractors.
- 14.5 OSHA's Multi-Employer Citation Policy.
- 14.6 Cross Reference List of OSHA and Consensus Electrical Standards.
- 14.7 Sample Lockout/Tagout Procedures.
- 14.8 Sources for Other Reference Materials.

Note: *These guidelines are presented as an expanded reference so that your Company Site Superintendents, Safety Coordinators, and Foreman will have available sample procedures, forms, training materials, and other information that could help to establish the Company's task-specific electrical safety procedures. It is the responsibility of the Company and its Employees to assure the accuracy of the guidelines and the proper application of the information to the particular task conditions that are encountered at their jobsites.*

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NECA GUIDELINES FOR ELECTRICAL SAFETY WORK PRACTICES

1.0 INTRODUCTION

Progressive customers require potential project bidders to submit, as part of their bid proposal package, a copy of the bidder's company safety manual. These customers often also require the successful bidder to submit a copy of their company's site-specific safety and health procedures and action plans prior to starting any project work.

To assist electrical contractors in meeting Customer mandates, NECA has made available numerous safety publications that help address best practices for developing, implementing, and administering company safety and total loss control programs, company manuals, and site-specific safety procedures and action plans - see Exhibit 14.1 on page 87.

This publication primarily focuses on inside electrical work. It does not cover electrical safety procedures for low-voltage & limited-energy, fiber optic, telecommunication, or communication tower construction activities. For guidance in developing electrical safety procedures covering these work activities, please refer to the *NECA's Voice-Data-Video Contractor Safety Compliance Manual*. In addition, this publication does not address compliance with OSHA's Construction Industry Subpart V - Power Transmission and Distribution Standards 29 CFR 1926.950 through 1926.960 or OSHA's General Industry Subpart R - Electric Power Generation, Transmission, and Distribution Standard 29 CFR 1910.269.

The *NECA's Guidelines for Electrical Safety Work Practices* has been developed to assist Site Superintendents, Safety Coordinators, and Foremen to address all actual and potentially hazardous phases of the Company's electrical work packages in order to safeguard Company employees, other site workers, and the Customer's assets. The guidelines cover task-specific electrical safety program principles, controls, procedures, and related medical and emergency rescue action plans.

2.0 OBJECTIVES

The four major objectives of this manual are to help:

- Comply with the Customer's project electrical safety contractual requirements.
- Identify significant national consensus electrical standards and federal or state OSHA 1910 & 1926 electrical safety standards with a look toward the most stringent standards.
- Establish the Company's project electrical safety programs, procedures, and action plans to provide electrically-safe work conditions for Company employees and site personnel.
- Define the Company's electrical accident rescue and emergency action planning requirements.

3.0 NATIONAL CONSENSUS ELECTRICAL SAFETY STANDARDS

National consensus standards are normally written by volunteers and published by standards developing organizations (SDO's). Some consensus standards are product-oriented. Others define testing requirements, cover design and installation criteria, or personal safety guidelines. Many national consensus standards become legally mandated by governmental organizations. Since national consensus standards are generally regarded as accepted engineering practices, these can be used for litigation purposes, when entered as evidence in legal proceedings. The SDO's, which follow, address various electrical safety guidelines.

3.1 NFPA 70 - NATIONAL ELECTRICAL CODE (NEC)

NFPA 70 is commonly called the National Electrical Code or the NEC. The NEC is currently adopted by more than 1,800 different governmental organizations in the U.S., and by several Latin American countries. These organizations include city, county or state governments. Some adopt the NEC as it is published by NFPA; others add or subtract requirements.