NEIS

NECA 413-2012

Standard for Installing and Maintaining

Electric Vehicle Supply Equipment (EVSE)

AN AMERICAN NATIONAL STANDARD

NECA Published by
National Electrical Contractors Association

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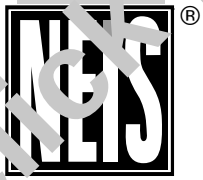

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(This foreword is not a part of the standard)

Foreword

Introduction

National Electrical Installation Standards™ (NEIS) are designed to improve communication among specifiers, purchasers, and suppliers of electrical construction services. They define a minimum baseline of quality and workmanship for installing electrical products and systems. *NEIS* are intended to be referenced in contract documents for electrical construction projects. The following language is recommended:

> Telecommunications bonding and grounding planning and installations shall be installed in accordance with NECA 413-2012, *Standard for Installing and Maintaining Electric Vehicle Supply Equipment (EVSE) (ANSI).*

Use of *NEIS* is voluntary, and the National Electrical Contractors Association assumes no obligation or liability to users of this publication. Existence of a standard shall not preclude any member or non-member of NECA from specifying or using alternate construction methods permitted by applicable regulations.

This publication is intended to comply with the National Electrical Code® (NEC®). Because they are quality standards, *NEIS* may in some instances go beyond the minimum safety requirements of the NEC. It is the responsibility of users of this publication to comply with state and local electrical codes and Federal and state OSHA safety regulations as well as to follow manufacturers' installation instructions when installing electrical products and systems.

Suggestions for revisions and improvements to this standard should be addressed to:

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1. Scope

This standard describes the procedures for installing and maintaining AC Level 1, AC Level 2 and fast charging DC (initially known in the industry as AC Level 3 and currently known in the industry as DC Level 2) Electric Vehicle Supply Equipment (EVSE).

1.1 Products and Applications Included

This standard covers Electric Vehicle Supply Equipment (EVSE) that complies with applicable local, state and federal regulations, codes and standards for AC Level 1, AC Level 2 and fast charging DC (DC Level 2) EVSE intended for transferring energy between premises wiring systems and electric vehicles (EVs).

1.2 Products and Applications Excluded

This standard does not apply to other than Code compliant AC Level 1, AC Level 2 and fast charging DC (DC Level 2) EVSE, as well as to off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like.

1.3 Regulatory and Other Requirements

a) All information in this publication is intended to conform to the National Electrical Code® (ANSI/NFPA Standard 70). Installers should always follow the NEC®, applicable state and local codes, and manufacturer's instructions when installing and maintaining Electric Vehicle Supply Equipment (EVSE).

b) Only qualified persons as defined in the NEC® familiar with the construction and operation of Electric Vehicle Supply Equipment (EVSE) should perform the technical work described in this publication. Administrative functions and other non-

Figure 1.1.1 Electric vehicle supply equipment (Courtesy of NECA)

Figure 1.1.2 Photo showing typical AC Level 1 electric vehicle supply equipment (EVSE) (Courtesy of Legrand/Pass and Seymour)

Figure 1.1.3 Photo showing typical AC Level 2 electric vehicle supply equipment (EVSE) (Courtesy of Legrand/Pass and Seymour)

technical tasks can be performed under the supervision of a qualified person. All work should be performed in accordance with NFPA 70E, *Standard for Electrical Safety in the Workplace,* in addition to applicable OSHA regulations.

c) General requirements for installing electrical products and systems are described in NECA 1-2010, *Standard Practices for Good Workmanship in Electrical Construction* (ANSI). Other *National Electrical Installation Standards* provide additional guidance for installing particular types of electrical products and systems. A complete list of *NEIS* is provided in Annex C.