



## NECA/EGSA 404-2014

Standard for

# Installing Generator Sets

AN AMERICAN NATIONAL STANDARD



Published by  
National Electrical Contractors Association



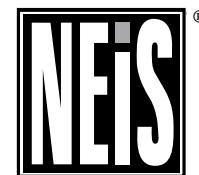
Jointly developed with  
Electrical Generating Systems Association

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<b>Revision History</b>	
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(This foreword is not a part of the standard)

# Foreword

*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:

Generator sets for on-site power generation shall be installed in accordance with NECA/EGSA 404-2014, *Standard for Installing Generator Sets* (ANSI).

Use of *NEIS* is voluntary, and neither the National Electrical Contractors Association (NECA) nor the Electrical Generating Systems Association (EGSA) assumes any obligation or liability to users of this publication. Existence of a standard shall not preclude any member or nonmember of NECA from specifying or using alternate construction methods permitted by applicable regulations.

The installation and maintenance practices recommended by this publication are intended to comply with the edition of the National Electrical Code® (NEC®) in effect at the time of publication. 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 when installing electrical products and systems.

Suggestions for revisions and improvements to this standard are welcome. They should be addressed to:

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# 1. Scope

## 1.1 Products and Applications Included

This standard describes installation procedures for generators and related accessories and systems that are permanently installed for on-site standby or emergency power generation that are typically fueled by natural gas or diesel. Such generators may be defined as “emergency systems” or “legally-required standby systems” intended to supply power for emergency or life-safety applications in accordance with NFPA 70, National Electrical Code.

## 1.2 Products and Applications Excluded

This standard does not cover installation or maintenance procedures for:

- Residential generators. See NECA 406, *Standard for Installing and Maintaining Residential Generator Sets* (ANSI).
- Portable generators. Portable generators are typically supplied from the manufacturer with an inaccessible internal neutral-to-ground bonding jumper connected from the neutral point of the generator winding to the frame of the generator. GFCI protection required for portable generators is de-sensitized by multiple neutral-to-ground bonds, such as at service equipment and at a portable generator.
- Generator maintenance. Generator service and maintenance must be performed in accordance with manufacturer instructions, and all service records must be retained along with all documentation of refueling, as required by applicable local, state and national environmental regulations.

This standard does not cover general design considerations for onsite power systems.

## 1.3 Regulatory and Other Requirements

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 electrical equipment and systems.

Only qualified persons as defined in the NEC familiar with the construction and installation of electrical power generation and distribution equipment and control systems should perform the technical work described in this publication. Administrative functions and other 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*.

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 A.