



IEEE Recommended Practice for Personnel Qualifications for Installation and Maintenance of Stationary Batteries

IEEE Power & Energy Society

Sponsored by the
Stationary Batteries Committee

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Abstract: This recommended practice defines the areas of recommended knowledge for installers and maintainers of stationary batteries and related systems to the extent that they affect the battery. Design of the dc system and sizing of the dc battery charger(s) are beyond the scope of this document. This recommended practice covers only lead-acid and nickel-cadmium battery technologies. Its purpose is to provide an outline (not necessarily in training order) of the items that should be covered by training programs for stationary battery installation and maintenance personnel. The IEEE will not be certifying trained personnel nor providing its own battery technician training programs.

Keywords: battery, certification, classroom, competent, course, curriculum, education, experience, inspect, install, instruct, knowledge, level, maintenance, monitor, preventative, proactive, proficient, qualification, routine, service, skill, student, teach, technician, test

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Introduction

This introduction is not part of IEEE Std 1657-2009, IEEE Recommended Practice for Personnel Qualifications for Installation and Maintenance of Stationary Batteries.

Although ac and dc electricity follow the same physical laws, there are differences. Training of electricians worldwide is fairly standardized through apprenticeship programs, classroom and self-paced training courses, etc. Although electricians are trained on dc, they spend most of their time working on ac systems. As a result, an electrician hired to work on dc systems (especially battery systems) may not have the expertise, training, or experience to install or work on batteries. The Stationary Batteries Committee of the IEEE Power & Energy Society (PES) recognizes that specific training on battery system installation and maintenance is necessary. The committee also recognizes that training of battery maintenance and installation technicians is generally nonexistent or, at the least, nonstandard. With those concerns in mind, the committee has written this recommended guide for training to specify the types of knowledge a battery installation or maintenance technician should possess in order to safely and competently work on lead-acid and nickel-cadmium (Ni-Cd) batteries.

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1. Overview

1.1 Scope

This recommended practice defines the areas of recommended knowledge for installers and maintainers of stationary batteries and related systems to the extent that they affect the battery. Design of the dc system and sizing of the dc battery charger(s) are beyond the scope of this recommended practice. This document covers lead-acid and nickel-cadmium (Ni-Cd) battery technologies.

1.2 Purpose

The purpose of this recommended practice is to provide an outline of the necessary items that should be covered by training programs for stationary battery installation and maintenance personnel. The order in which the items in this document are covered is at the discretion of the training developer/provider.