

IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications

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IEEE Power Engineering Society**

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Abstract: Methods for defining the dc load and for sizing a nickel-cadmium battery to supply that load are described. Installation, maintenance, qualification, testing procedures, and consideration of battery types other than nickel-cadmium batteries are not included. Design of the dc system and sizing of the battery charger(s) are also not included.

Keywords: nickel-cadmium batteries, stationary applications

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Introduction

(This introduction is not a part of IEEE Std 1115-1992, IEEE Recommended Practice for Sizing Nickel-Cadmium Batteries for Stationary Applications.)

This document provides the recommended practice for methods defining the dc load and for sizing a nickel-cadmium battery to supply that load.

In the 1992 IEEE style, notes in text are not a normative part of a standard. This standard makes an exception to that rule. In future revisions, this exception will not occur.

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1. Scope

This recommended practice describes methods for defining the dc load and for sizing a nickel-cadmium battery to supply that load. Some factors relating to cell selection are provided for consideration.

Installation, maintenance, qualification, testing procedures, and consideration of battery types other than nickel-cadmium batteries are beyond the scope of this recommended practice.

Design of the dc system and sizing of the battery charger(s) are also beyond the scope of this recommended practice.

2. References

This standard shall be used in conjunction with the following publications:

IEEE Std 100-1992, The New Standard Dictionary of Electrical and Electronics Terms.¹

IEEE Std 323-1983 (Reaff 1990), IEEE Standard for Qualifying Class 1E Equipment for Nuclear Power Generating Stations (ANSI).

IEEE Std 485-1983, IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations (ANSI).

IEEE Std 494-1974 (Reaff 1990), IEEE Standard Method for Identification of Documents Related to Class 1E Equipment and Systems for Nuclear Power Generating Stations (ANSI).

IEEE Std 946-1985, IEEE Recommended Practice for the Design of Safety Related DC Auxiliary Power Systems for Nuclear Power Generating Stations (ANSI).

IEEE Std 1106-1987, IEEE Recommended Practice for Maintenance, Testing and Replacement of Nickel-Cadmium Storage Batteries for Generating Stations and Substations (ANSI).

¹IEEE publications are available from the Institute of Electrical and Electronic Engineers, Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, USA.