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# IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations



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(Revision of  
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Std 485-1978)

# **IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations**

Sponsor

**Power Generation Committee of the  
IEEE Power Engineering Society**

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## Foreword

(This Foreword is not a part of IEEE Std 485-1983, IEEE Recommended Practice for Sizing Large Lead Storage Batteries for Generating Stations and Substations.)

Although the storage battery is of primary importance in ensuring the satisfactory operation of generating stations and substations, no single up-to-date guide exists to aid engineers in sizing the battery for a particular installation. This recommended practice is based on commonly accepted methods used to define the load and to ensure adequate battery capacity. The method described is applicable to all installations and battery sizes.

The installations considered herein are designed for *full float* operation with a battery charger serving to maintain the battery in a charged condition as well as to supply the normal dc load.

This recommended practice was prepared by the Working Group on Batteries of the Station Design Subcommittee of the IEEE Power Generation Committee. It may be used separately, but, when combined with ANSI/IEEE Std 450-1980, IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations, and IEEE Std 484-1981, IEEE Recommended Practice for Installation Design and Installation of Large Lead Storage Batteries for Generating Stations and Substations, it will provide the user with a general guide to designing, placing in service, and maintaining a large storage battery installation. At the time this standard was approved the members of the Working Group on Batteries of the Station Design Subcommittee were:

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