

An American National Standard
**IEEE Standard for Type Tests of
Continuous Duty Class 1E Motors for
Nuclear Power Generating Stations**

Sponsor
**Nuclear Power Engineering Committee of the
IEEE Power Engineering Society**

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Foreword

(This foreword is not a part of IEEE Std 334-1974, IEEE Standard for Type Tests of Continuous Duty Class 1E Motors for Nuclear Power Generating Stations.)

IEEE Std 323-1974, IEEE Standard for Qualifying Class 1E Equipment for Nuclear Power Generating Stations, describes the basic requirements for equipment qualification. It requires that the qualification of Class 1E electric equipment include the demonstration of the capability of the equipment, or the components thereof, to meet their performance specifications under normal environments and under those conditions that cause and are caused by the design basis events for the station. Motors designed for use inside and outside the containment are covered by this standard.

The intent of this document is to provide guidance for the development of tests or analytical data that are adequate to demonstrate the capability of continuous duty Class 1E electric motors to perform their safety function. It discusses general requirements of both Class 1E electric motors and service conditions pertinent to nuclear power generating stations. It gives guidelines to insure uniformity in reporting data and to permit direct comparison of required and test values of all significant parameters. A chart of these parameters is required in Section 8, Documentation.

This document presents specific procedures and criteria applicable to qualifying motors and supplements the criteria described in IEEE Std 323-1974.

Each applicant for a construction permit or an operating license is required to provide assurance that all components are adequate for their service conditions to comply with the Atomic Energy Commission Code of Federal Regulations, pt 50. This standard is intended to assist him to that end; however, adherence to this standard may not suffice for assuring public health and safety because it is the integrated performance of all systems that establishes the consequences of design basis events. These systems include fluid, instrumentation, and electrical systems of the station. Each applicant has the responsibility to assure himself and others that this standard, if used, is pertinent to his application and that the integrated performance of his station is adequate.

This revision of this document was prepared by a Working Group of the Rotating Machinery Committee and sponsored by Subcommittee 2 (Equipment Qualification) of the Nuclear Power Engineering Committee.

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