

1970

IEEE Criteria for
CLASS IE ELECTRIC SYSTEMS
FOR NUCLEAR POWER GENERATING STATIONS

IEEE No. 308



PUBLISHED BY

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, Inc.

345 EAST 47 STREET, NEW YORK, N. Y. 10017



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**Reprinted from IEEE TRANSACTIONS ON NUCLEAR SCIENCE,
VOL. NS-17, No. 5, October and
IEEE TRANSACTIONS ON POWER APPARATUS AND SYSTEMS,
VOL. PAS-89, No. 6, July/August 1970**

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IEEE Criteria for

CLASS IE ELECTRIC SYSTEMS

FOR NUCLEAR POWER GENERATING STATIONS

FOREWORD

This Standard presents criteria and requirements for the electric systems of nuclear generating stations specifically related to providing protection to the health and safety of the public. These are based on the following.

- (a) Redundant systems that require electric power are provided to cope with design basis events.
- (b) The conditions and the availability of the various portions of the systems following a design basis event cannot be predicted exactly.
- (c) The access to certain equipment following a design basis event may be limited for several months.

The Institute of Electrical and Electronics Engineers has developed these criteria to provide guidance in the determination of the design features, minimum conditions of operation, and the surveillance requirements related to the electric power systems of the nuclear facility. Each applicant for a construction permit or an operating license for a nuclear facility in the U.S.A. is required to develop these items to comply with the Atomic Energy Commission's Code of Federal Regulations, Part 50.

Adherence to these criteria may not suffice for assuring the public health and safety because it is the integrated performance of the structures, the fluid systems, the instrumentation, and the electric systems of the station that establishes the consequences of accidents. Failure to meet these requirements may be an indication of system inadequacy. Each applicant has the responsibility to assure himself and others that this integrated performance is adequate.

The IEEE will maintain this Standard current with the state of the technology. Comments are invited on this Standard as well as suggestions for additional material that should be included. These should be addressed to:

Secretary
IEEE Standards Committee
The Institute of Electrical and Electronics Engineers, Inc.
345 East 47th Street
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ACKNOWLEDGMENT

The Institute wishes to acknowledge its indebtedness to those who have so freely given of their time and knowledge and have conducted experimental work on which many of the IEEE publications are based.

This document was prepared by Subcommittee 4, Auxiliary Power Systems, of the Nuclear Science Group's Technical Committee on Standards. Membership on the subcommittee was drawn both from the Technical Committee on Standards and from the IEEE Power Group's Power Generation Committee.

At the time of final subcommittee approval, the subcommittee members were:

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Approved by the IEEE Standards Committee on September 11, 1969. Individual reprints of this Standard are available from the IEEE at \$2.00 for members and \$4.00 for nonmembers.

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