American Nuclear Society

containment system leakage testing requirements

WITHDRAWN

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American National Standard for Containment System Leakage Testing Requirements

Secretariat
American Nuclear Society

Prepared by the
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American National Standard

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Foreword

(This foreword is not part of American National Standard for Containment System Leakage Testing Requirements, ANSI/ANS-56.8-1994.)

This standard provides a basis for determining leakage rates through the primary reactor containment systems of light-water-cooled nuclear power plants.

The leakage rate tests performed on the primary reactor containment system simulate some of the conditions (e.g., penetrations vented, flooded, or in operation) that exist during a design basis accident. The test methodology and the associated requirements for both whole containment (integrated) and individual pathway (local) leakage rate testing are contained in this document.

The appendices contain Type A and verification test methods, formula derivations, data rejection criteria, containment atmosphere stabilization criteria, and test termination criteria.

The regulatory requirements for containment leakage rate testing are contained in Title 10, "Energy," Code of Federal Regulations (CFR), Part 50, "Domestic Licensing of Production and Utilization Facilities," Appendix J, "Leakage Rate Testing of Containments of Light-Water-Cooled Nuclear Power Plants." This standard is not in complete agreement with the current version of Appendix J.

The previous revision to this standard was issued in 1987. This revision was written to take advantage of subsequent advancements in computer and instrument technology. Also incorporated are items which the committee believed to be improvements in testing methodology and requirements. These include: an as-found and as-left section, minimum and maximum pathway leakage rates, test termination limits, containment air mass stabilization criteria, and improved data rejection guidelines.

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