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Containment System Leakage Testing Requirements

An American National Standard

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American Nuclear Society
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American National Standard Containment System Leakage Testing Requirements

Secretariat
American Nuclear Society

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American National Standard

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Foreword

(This foreword does not contain any requirements of American National Standard "Containment System Leakage Testing Requirements," ANSI/ANS-56.8-2020, but is included for informational purposes.)

This standard specifies acceptable primary containment leakage rate test requirements to assure valid testing. The scope includes

(1) leakage test requirements;
(2) test instrumentation;
(3) test procedures;
(4) test methods;
(5) acceptance criteria;
(6) data analysis;
(7) inspection and recording of test results;
(8) guidance on which components and pathways require testing;
(9) test frequency.

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

The previous revision to this standard was issued in 2002. This revision was written to incorporate items that the committee believed to be improvements in test methodology and requirements.

Based upon the results of recent integrated leakage rate tests (ILRTs), the Type A test acceptance criterion previously specified in Appendix F of this standard has been deleted and replaced with a new criterion in the body of the standard.

The state of the art of ILRT instrumentation has greatly improved since 2002; these improvements have been reflected by changes to instrument accuracy requirements specified in this standard.

The examples given in various sections of this standard do not contain or modify any requirements. These examples are for illustration only and are provided to clarify the intent of the text. Furthermore, the examples are not meant to be all-inclusive.

Examples of alternative methods or exceptions to general requirements do not constitute permission to categorically apply the exceptions. Each alternative or exception needs to be evaluated to determine its validity and effect.

This standard does not incorporate the concepts of generating risk-informed insights, performance-based requirements, or a graded approach to quality assurance. The user is advised that one or more of these techniques could enhance the application of this standard.

This standard was prepared by the ANS-56.8 Working Group of the American Nuclear Society. The following members contributed to this standard:

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