



# Selection and Training of Personnel for Research Reactors

An American National Standard

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**American National Standard  
Selection and Training of  
Personnel for Research Reactors**

Secretariat  
**American Nuclear Society**

Prepared by the  
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Standards Committee  
Working Group ANS-15.4**

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## Foreword

(This foreword is not part of American National Standard “Selection and Training of Personnel for Research Reactors,” ANSI/ANS-15.4-2016.)

The standard “Selection and Training of Personnel for Research Reactors,” ANS-15.4, was first published in 1977. It was revised in 2007 to incorporate requirements for requalification and medical competence of licensed or certified operations personnel. It is again being revised, to address changes in regulatory requirements and attitudes and changes to medical techniques. The standard is designed to be easily adopted by the wide range of research reactors in operation in the United States and abroad.

Administrative and organizational requirements and structures, including reviews and audits, are found in companion standard ANSI/ANS-15.1-2007 (R2013), “The Development of Technical Specifications for Research Reactors.”

Critical facilities and fast pulse reactors should rely on existing standards ANSI/ANS-1-2000 (R2012), “Conduct of Critical Experiments,” and ANSI/ANS-14.1-2004 (R2014), “Operation of Fast Pulse Reactors,” and should use ANS-15.4 to supplement these standards to the extent applicable.

This standard might reference documents and other standards that have been superseded or withdrawn at the time the standard is applied. A statement has been included in the reference section that provides guidance on the use of the references.

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.

The family of research reactor standards that would be helpful for operators, users, and regulators of these facilities are the following:

- ANSI/ANS-15.1-2007 (R2013), “The Development of Technical Specifications for Research Reactors”;
- ANSI/ANS-15.2-1999 (R2016), “Quality Control for Plate-Type Uranium-Aluminum Fuel Elements”;
- ANSI/ANS-15.8-1995 (R2013), “Quality Assurance Program Requirements for Research Reactors”;
- ANSI/ANS-15.11-2009, “Radiation Protection at Research Reactor Facilities”;
- ANSI/ANS-15.15-1978 (R1986), “Criteria for the Reactor Safety Systems of Research Reactors” (withdrawn);
- ANSI/ANS-15.16-2015, “Emergency Planning for Research Reactors”;
- ANSI/ANS-15.21-2012, “Format and Content for Safety Analysis Reports for Research Reactors.”

The ANS-15.4 Working Group that developed the standard under the auspices of the Operation of Research Reactors Subcommittee was composed of the following members:

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