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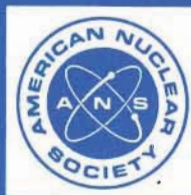
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November 14, 2004
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decommissioning of research reactors

an American National Standard

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**American National Standard
for Decommissioning of
Research Reactors**

Secretariat
American Nuclear Society

Prepared by the
**American Nuclear Society
Standards Committee
Working Group ANS-15.10**

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American National Standard

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Foreword

(This Foreword is not a part of American National Standard for Decommissioning of Research Reactors, ANSI/ANS-15.10-1994, but is included to provide a background and explain the need for non-power reactor standards and criteria concerning the use of those standards.)

The American Nuclear Society Standards Secretariat established Subcommittee ANS-15 in the fall of 1970 with the task of preparing a standard for the operation of research reactors. In January 1972, this charter was expanded to the multiple tasks of preparing all standards for research reactors. To implement this enlarged responsibility, several subcommittee working groups were established to develop standards for consideration, and complementary action by Subcommittee ANS-15. ANS-15.10 is one of these groups.

In March 1979, Working Group ANS-15.10 was assigned the task of developing a draft standard for decommissioning of research reactors. Since that time changes in regulatory policy were incorporated into this current revision.

Present decommissioning regulations for reactors are contained in Title 10, "Energy," Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," which addresses primarily the financial qualifications of the applicants. The policy for licensed power reactors is contained in U.S. Nuclear Regulatory Commission (NRC) Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors," which was issued in June 1974 and is generally used as a basis for decommissioning activity. Currently, the NRC is in the process of developing more specific criteria through an enhanced participatory rulemaking process designed to establish radiological criteria for the decommissioning of NRC-licensed facilities. Section 5 in general and Table 5.2 in particular are presented as the best available criteria that are reasonable and acceptable, but subject to change as further focused analysis is completed. This standard provides needed procedures, criteria, and standardization for the decommissioning of research reactors; the standard which is also appropriate for test reactors.

As a caution, because of the current developmental activity by the NRC in this area, it should be recognized that some of the procedures and criteria stated in this standard are not based on existing regulations, and that as regulations are developed and approved, such procedures and criteria may be subject to change.

In preparing this standard, the intent has been to specify objectives that will:

- (a) Assist in implementing regulatory requirements.
- (b) Be a significant aid in planning and executing decommissioning activities.

The family of American National Standards developed by ANS-15 for research reactors includes the following:

- ANSI/ANS-15.1-1990, American National Standard for the Development of Technical Specifications for Research Reactors
- ANSI/ANS-15.2-1990, American National Standard for Quality Control for Plate-Type Uranium-Aluminum Fuel Elements
- ANSI/ANS-15.4-1988, American National Standard for Selection and Training of Personnel for Research Reactors
- ANSI/ANS-15.7-1977 (R1986), American National Standard for Research Reactor Site Evaluation
- ANSI/ANS-15.8-1976 (R1986), American National Standard for Quality Assurance Program Requirements for Research Reactors
- ANSI/ANS-15.11-1993, American National Standard for Radiation Protection at Research Reactor Facilities
- ANSI/ANS-15.15-1978 (R1986), American National Standard Criteria for the Reactor Safety Systems of Research Reactors
- ANSI/ANS-15.16 (R1988), American National Standard for Emergency Planning for Research Reactors
- ANSI/ANS-15.17 (R1987), American National Standard Fire Protection Program Criteria for Research Reactors
- ANSI/ANS-15.19-1991, American National Standard for Shipment and Receipt of Special Nuclear Material (SNM) by Research Reactor Facilities

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