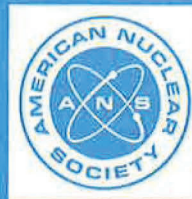


American Nuclear Society

WITHDRAWN

**emergency planning
for research reactors**

an American National Standard



published by the
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**American National Standard
for Emergency Planning
for Research Reactors**

**Secretariat
American Nuclear Society**

**Prepared by the
American Nuclear Society
Standards Committee
Working Group ANS-15.16**

**Published by the
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American National Standard

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Foreword

(This foreword is not a part of American National Standard for Emergency Planning for Research Reactors, ANSI/ANS-15.16-1978.)

The ANS 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, a number of Subcommittee Work Groups have been established to develop standards for consideration and complementary action by Subcommittee ANS-15. ANS-15.16 is one of these groups.

Work Group ANS-15.16 was assigned the task of developing a draft standard for Emergency Planning in June 1975 with the following membership:

W. Richards, Chairman, <i>Argonne National Laboratory-West</i>	R. Curtis, <i>University of California, Berkeley</i>
P. Gray, <i>Savannah River Laboratory</i>	T. Crites, <i>Lawrence Livermore Laboratory</i>

In this process of creating standards against the background of established and varied practices in many operating facilities it is important to consider:

- a. It is not intended that the standard be used as a demand model for back-fitting purposes.
- b. It should be a vital aid for the new owner-agency.
- c. It should be helpful for the facility undergoing change/modification.
- d. Its thoughtful use by industry should ease the burden of regulatory agencies.

The need for this standard resulted from a request from Nuclear Regulatory Commission to either have a standard well developed by the first of the year 1976 or have Regulatory impose their standard on the research reactor community.

The work group has attempted to generate a standard which offers guidance in emergency planning.

This proposed standard has attempted to establish a clear and helpful set of planning steps to ensure that emergencies can be handled in a safe and efficient manner. We have incorporated many concepts from Title 10, Code of Federal Regulations, Part 50, Appendix E, "Emergency Plans for Production and Utilization Facilities," Regulatory Standard Review Plan Sec. 13.3 and many other guides for emergency planning. We have departed from the format of Sec. 13.3 in the belief that the new format is more concise and one can get an overall idea of the scope involved in emergency planning. The definition of research reactor, used in this standard and all ANS-15 standards is being revised. Until such revision is complete the present definition will apply.

We affirm that the use of any standard of performance, conduct or excellence is volitional. The decision to use a standard is a management matter, presumably on technical advisement. The institutionalizing of a standard can and almost must be conditional; i.e., high probability exists that some exception or addition will compromise the absolute, unconditional application of a document which was composed to cross lines of functional and material discipline.

It is a management function to ameliorate or mitigate conditional matter. It is not the function of a standard to attempt to accommodate the many different management systems. Neither is its function to preempt management prerogatives.

This standard is promulgated in the context of these considerations, and in the context of a family of related research reactor standards, a Work Group and an actively participating Subcommittee in an atmosphere of direct exchange of ideas across multi-discipline and multi-system boundaries.

The membership of Subcommittee ANS-15 at the time of approval of this standard was:

- | | |
|--|---|
| D. F. Hanlen, Chairman, <i>Brown & Root, Inc.</i> | P. Farrar, <i>University of Virginia</i> |
| M. A. Bell, <i>US-ERDA, Washington</i> | G. Geisler, <i>Pennsylvania State University</i> |
| F. T. Binford, <i>Oak Ridge National Laboratory</i> | P. Kraker, <i>U.S. Geologic Survey, Denver</i> |
| L. Bonzon, <i>Sandia Laboratory</i> | T. M. Raby, <i>U.S. National Bureau of Standards</i> |
| J. Carter, <i>U.S. Nuclear Regulatory Commission, Washington</i> | W. J. Richards, <i>Argonne National Laboratory West</i> |
| T. R. Crites, <i>Lawrence Livermore Laboratories</i> | R. R. Walston, <i>U.S. Nuclear Regulatory Commission, Albuquerque</i> |
| R. Curtis, <i>U.S. Nuclear Regulatory Commission</i> | W. L. Whittemore, <i>General Atomic Company</i> |
| A. C. Ellingson, <i>Sandia Laboratory</i> | |

The American National Standards Committee N17, Research Reactors, Reactor Physics, and Radiation Shielding, had the following membership at the time it reviewed and approved this Standard:

- W. L. Whittemore, *Chairman*
R. S. Carter, *Secretary*

<i>Organization Represented</i>	<i>Name of Representative</i>
American College of Radiology.....	M. M. TerPogossian
American Institute of Chemical Engineers.....	R. Duffy
American Nuclear Society.....	W. L. Whittemore
American Physical Society.....	W. W. Havens, Jr. H. Goldstein (Alt)
American Public Health Association.....	C. G. Amato W. A. Holt (Alt)
American Society of Mechanical Engineers.....	R. A. Axford
American Society of Radiologic Technologists.....	J. H. Tolan
Health Physics Society.....	C. A. Willis
Institute of Electrical & Electronics Engineers.....	H. A. Thomas
National Bureau of Standards.....	R. S. Carter T. M. Raby (Alt)
National Council on Radiation Protection & Measurement.....	A. B. Chilton
U.S. Nuclear Regulatory Commission.....	K. R. Goller R. J. Schemel (Alt)
U.S. Energy Research & Development Administration.....	P. B. Hemmig J. W. Lewellen (Alt)
Individual Members.....	J. E. Olhoeft A. M. Perry E. A. Warman

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