American Nuclear Society

criticality safety criteria for the handling, storage, and transportation of LWR fuel outside reactors

an American National Standard

REAFFIRMED

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REAFFIRMED

September 14, 2009

ANSI/ANS-8.17-2004 (R2009)

This standard has been reviewed and reaffirmed with the recognition that it may reference other standards and documents that may have been superseded or withdrawn. The requirements of this document will be met by using the version of the standards and documents referenced herein. It is the responsibility of the user to review each of the references and to determine whether the use of the original references or more recent versions is appropriate for the facility. Variations from the standards and documents referenced in this standard should be evaluated and documented.

This standard does not necessarily reflect recent industry initiatives for risk informed decision-making or a graded approach to quality assurance. Users should consider the use of these industry initiatives in the application of this standard.

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Criticality Safety Criteria for the Handling, Storage, and Transportation of LWR Fuel Outside Reactors

Secretariat
American Nuclear Society

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Working Group ANS-8.17

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American National Standard

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Comments on this standard are encouraged and should be sent to Society Headquarters.

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Foreword

(This foreword is not a part of American National Standard Criticality Safety Criteria for the Handling, Storage, and Transportation of LWR Fuel Outside Reactors, ANSI/ANS-8.17-2004)

Criticality safety is an important component in a comprehensive safety assessment of a facility or an operation involving fissile materials. Designers, operators, and standards writing groups having concern with nonreactor nuclear facilities justifiably have occasion to address criticality safety. The present work was undertaken in the interest of an orderly presentation that embodies criticality safety principles and practices consistent with existing American Nuclear Society standards in the field of criticality safety, Subcommittee 8, Fissionable Materials Outside Reactors, of the ANS Standards Committee. The principal intent of the ANS-8.17 working group has been to provide basic requirements that address the criticality safety aspects of a facility or operation and that can be referenced or used in conjunction with other safety standards or regulations to address the total safety and operational requirements. This standard presents safety criteria applicable to the handling, storage, and transportation of light water reactor fuel rods and elements outside a reactor core.

This revision of the standard was drafted by Working Group ANS-8.17 of Subcommittee 8 of the American Nuclear Society. The following members participated in the preparation:

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Contents

Section		Page
1	Introduction	1
2	Scope	1
3	Definitions	1
4	General Safety Criteria	1
5	Criteria to Establish Subcriticality	2
6	References	3
Appendix		
	Fuel Unit Handling, Storage, and Transportation: Criticality Safety Considerations	4