

American Nuclear Society

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

an American National Standard

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REAFFIRMED

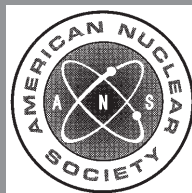
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**American National Standard
Criticality Safety Criteria for the Handling, Storage,
and Transportation of LWR Fuel Outside Reactors**

Secretariat
American Nuclear Society

Prepared by the
**American Nuclear Society
Standards Committee
Working Group ANS-8.17**

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American National Standard

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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.

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