

# American Nuclear Society

**administrative practices for nuclear criticality safety**

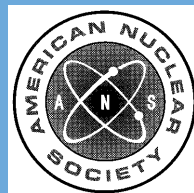
**an American National Standard**

**WITHDRAWN**

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## Foreword

(This foreword is not a part of the American National Standard “Administrative Practices for Nuclear Criticality Safety,” ANSI/ANS-8.19-2005.)

Administrative practices for nuclear criticality safety have evolved in the various organizations processing fissionable materials in ways appropriate to these organizations. Stimulated by expressions of interest on the part of the U.S. Nuclear Regulatory Commission, Subcommittee ANS-8 of the Standards Committee of the American Nuclear Society has developed this standard. Typical of the differences between organizations is the nature of the nuclear criticality safety staff. While the functions assigned to the staff by this standard are being carried out by all these organizations, the administrative arrangements are so diverse that a concise definition of the term “nuclear criticality safety staff” has not been developed. In essence, the staff comprises those elements of the organization that, in concert, carry out the functions described.

During this revision of the standard, there was much discussion regarding the use of the term “fissile.” Some think the broader term, “fissionable,” should be used in place of “fissile,” while others held to the opinion that the standard does not apply to all fissionable materials. The term “fissile” is the most commonly used term and is appropriate in the majority of applications, although it does not include every nuclide that could present a nuclear criticality safety concern. Facilities that have nuclear criticality safety concerns with nuclides that are fissionable, but not fissile, can also apply this standard to those situations. For the purposes of this standard, the term “fissile” is intended to apply to any nuclide that presents a nuclear criticality safety concern.

This revision was prepared with the objective of providing additional guidance for facilities where missions are changing and equipment and operations are undergoing a decline in usage or, in some cases, cessation of operations. Clarifications, where appropriate, were also made consistent with the evolution of this standard.

Most of the guidance provided in Section 10 of the previous revision of this standard was deleted and replaced with a reference to American National Standard “Nuclear Criticality Accident Emergency Planning and Response,” ANSI/ANS-8.23-1997.

This revision of the standard was drafted by Working Group ANS-8.19 of Subcommittee 8 of the American Nuclear Society. The membership of the working group at the time of the revision was as follows:

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