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nuclear criticality safety in operations with fissionable material outside reactors

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American National Standard for Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors

Secretariat American Nuclear Society

Prepared by the American Nuclear Society Standards Committee Subcommittee ANS-8

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Foreword

(This Foreword is not a part of American National Standard for Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors. N16.1-1975/ANS-8.1.)

This Standard provides guidance for the prevention of criticality accidents in the handling, storing, processing, and transporting of fissionable materials. It was first drafted in 1958 by a subcommittee of both the Standards Committee of the American Nuclear Society and Sectional Committee N6 of the American Standards Association and was designated American Standard N6.1-1964. (In 1966, the USA Standards Institute was constituted as successor to the ASA; in 1969 the name of the Institute was changed to American National Standards Institute.) Increased basic knowledge and operating experience made desirable the revision designated American National Standard N16.1-1969 which extended American National Standard N6.1-1964 and included the specification of limits applicable to process variables for the prevention of criticality accidents. The wide acceptance of the revision has made desirable its reaffirmation, with some changes to improve clarity and to modify the concentration limit for ²³⁹Pu in accordance with recent re-examinations of the minimum critical concentration of

The prescribed five-year review of American National Standard N16.1-1969 was performed by Subcommittee 8 of the Standards Committee of the American Nuclear Society, the originating body. The review was managed by H. K. Clark, E.I. du Pont de Nemours and Co., Savannah River Laboratory.

This resulting revision was prepared under the guidance of Subcommittee 8; Fissionable Material Outside Reactors, having the following membership:

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The American National Standard Committee N16, Nuclear Criticality Safety, which reviewed and approved this revision in 1975, had the following membership:

Dixon Callihan, Chairman E. B. Johnson, Secretary

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