American Nuclear Society

WITHDRAWN

guidelines for the documentation of digital computer programs

an American National Standard

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American National Standard Guidelines for the Documentation of Digital Computer Programs

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American National Standard

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Foreword

(This Foreword is not a part of the American National Standard Guidelines for the Documentation of Digital Computer Programs, ANSI/ANS 10.3-1986.)

This standard supersedes and is a revision of American National Standard Guidelines for the Documentation of Digital Computer Programs, ANSI/ANS-10.3/N413-1974, which was itself a revision of ANS Std 2-1967. These documents were prepared by Subcommittee ANS-10 of the Standards Committee of the American Nuclear Society (ANS). This subcommittee is sponsored by the Mathematics and Computation Division of the Society. Since its inception the Mathematics and Computation Division has encouraged and promoted the interchange of digital computer programs (codes) within the nuclear industry. The guidelines recommended herein are based on experience in working with programs for neutronics, shielding, and engineering calculations in this industry.

This standard presents guidelines for the documentation of engineering and scientific computer programs. Good documentation promotes understanding, reduces duplication of effort, eases conversion to different computer environments, and aids modification for extended applications. Good documentation is essential for implementation and effective use of programs obtained from other installations.

Since the intention of this standard is to encourage better communication between the developer and user, it should be regarded as a guide rather than a set of rigid specifications. As a guide, it is sufficiently comprehensive to apply to large-scale programs intended for extensive external use. Not all features of this document are appropriate in all circumstances. For example, programs in the initial experimental stage would not be expected to require documentation as extensive as outlined in this standard. The degree of conformance is a matter of judgment and must be decided for each individual situation by the management of the development effort. In general, as the project complexity increases so does the need for more complete documentation. An organization may have special documentation requirements which extend these guidelines.

This standard presents guidelines that are important for interchanging computer programs from one installation to another. It is one of three documents directed toward individuals who develop computer programs. The other two are American National Standard for Recommended Programming Practices to Facilitate the Portability of Scientific Computer Programs, ANSI/ANS-10.2-1982, and American National Standard Guidelines for Considering User Needs in Computer Program Development, ANSI/ANS-10.5-1979.

This standard was drafted by Working Group ANS-10.3. Members of ANS-10.3 at the time this standard was approved were:

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