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Criteria for Technical
Specifications for Nuclear
Power Stations

Secretariat American Nuclear Society

Prepared by the American Nuclear Society Standards Committee Working Group ANS-58.4

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Foreword (This foreword is not a part of American National Standard Criteria for Technical Specifications for Nuclear Power Stations, ANSI/ANS-58.4-1979.)

> Historically, the preparation of technical specifications dealing with the radiological aspects of operating licenses was done on an individual basis for each facility. This ad hoc approach resulted in the issuance of specifications that addressed the broad categories required by Title 10, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," Section 50.36, but lacked overall consistency of technical content. As the number of operating plants increased, this inconsistency between specifications resulted in: an increasing diversity of opinion among applicants as to what should properly be included as technical specifications; protracted negotiations between license applicants and the Nuclear Regulatory Commission (NRC) leading to last minute resolution of substantive technical issues; an excessive and untimely expenditure of manpower at a critical phase in the licensing process; misapplication and misinterpretation of requirements by plant operating staffs and NRC inspection personnel; and a proliferation of requests for changes to technical specifications for operating facilities.

> In recognition of these difficulties and in an effort to provide a systematic approach to technical specification content, the NRC initiated the Standard Technical Specification Program in the Spring of 1972. The program was an integral part of the overall NRC licensing and standardization effort and had as its principal goal the development and maintenance of uniform and technically consistent generic Standard Technical Specifications (STS) for each Nuclear Steam Supply System (NSSS) product and related balance of plant. These generic STS are currently being used as the basis for issuance of individual facility technical specifications.

> The STS documents define in a highly detailed manner those features, characteristics and conditions necessary to ensure that a facility is maintained and operated with adequate protection for the health and safety of the public. Because the STS were developed and intended to be used as working documents, they do not provide direct guidance on the methods and rationale used in their development. Since technical specifications are an important element in the establishment and maintenance of an acceptable level of nuclear safety at each facility, it is essential that a reference framework of guidance for their development and criteria for their content be delineated in order to promote the common understanding of technical specifications throughout the nuclear industry.

> Working Group ANS-58.4 of the Standards Committe of the American Nuclear Society was chartered in August of 1975 to develop a standard for technical specifications that would provide criteria for their development consistent with the requirements of 10CFR50.36. This standard, applicable to all nuclear power plants, was developed in accordance with the aims outlined in the scope statement and does not extend to the environmental aspects of technical specifications. In accordance with ANS-50 policy, those criteria that are "nuclear safety related" are indicated by enclosing them in a box.

> The Working Group feels strongly that users of this standard should pay particular attention to the guidance contained in Appendices B and C. The early consideration of technical specifications in the development of the design, safety analysis, and operational planning, and the continuing application of operating experience to technical specifications are considered essential if the document is to be meaningful.

> This standard employs a technique using a discrimination device called "boxing." This technique indicates those statements which are nuclear safety related. The term 'nuclear safety" includes those requirements that are felt by the writing group to arise from official and implied NRC policies (including regulations, regulatory guides,

branch positions, the Standard Review Plan, and past practice on applications) as well as other requirements the group believes are related to nuclear safety. Non-nuclear safety related requirements include the following types of needs as they exclusively apply to areas not considered to be nuclear safety related: conventional safety, equipment reliability, plant availability, good engineering practice, and contractual (commercial) requirements.

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