



# REGULATORY GUIDE

## OFFICE OF STANDARDS DEVELOPMENT

### REGULATORY GUIDE 1.123

#### QUALITY ASSURANCE REQUIREMENTS FOR CONTROL OF PROCUREMENT OF ITEMS AND SERVICES FOR NUCLEAR POWER PLANTS

##### A. INTRODUCTION

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, "Licensing of Production and Utilization Facilities," establishes overall quality assurance requirements for the design, construction, and operation of safety-related structures, systems, and components of nuclear power plants. This guide describes a method acceptable to the NRC staff for complying with the Commission's regulations with regard to quality assurance requirements for control of procurement of items<sup>1</sup> and services during the design, construction, and operations phases of nuclear power plants. The Advisory Committee on Reactor Safeguards has been consulted concerning this guide and has concurred in the regulatory position.

##### B. DISCUSSION

Working Group N45-2.13 of the American National Standards Committee N45, Reactor Plants and Their Maintenance, has prepared a standard that includes quality assurance requirements for control of procurement of items and services for nuclear power plants. This standard was approved by Subcommittee N45-2, Nuclear Quality Assurance Standards, of the American National Standards Committee N45, the full committee, and by the American Society of Mechanical Engineers' Codes and Standards Committee. It was subsequently approved and designated N45.2.13-1976<sup>2</sup> by the American National Standards Institute on February 27, 1976.

\*Lines indicate substantive changes from previous issue.

<sup>1</sup> As used in this guide, an "item" is defined as any level of unit assembly including system, subsystem, subassembly, component, part, or material.

<sup>2</sup> ANSI N45.2.13-1976, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants," may be obtained from the American Society of Mechanical Engineers, 345 East 47th St., New York, N.Y. 10017.

NRC documents WASH-1283, "Guidance on Quality Assurance Requirements During Design and Procurement Phase of Nuclear Power Plants," dated May 24, 1974 (Grey Book-Revision 1) and WASH-1309, "Guidance on Quality Assurance Requirements During the Construction Phase of Nuclear Power Plants," dated May 10, 1974 (Green Book-Revision 0) contain guidance on acceptable methods of implementing portions of the quality assurance program. WASH-1283 and WASH-1309, which are used by the NRC staff in evaluating construction permit and operating license applications, contain proposed standard N45.2.13 (Draft 2, Rev. 4). ANSI N45.2.13-1976 reflects development from the proposed version included in the above WASH documents to the final version approved by the American National Standards Institute. In this revision of Regulatory Guide 1.123, which follows the public comment period, ANSI N45.2.13-1976 replaces N45.2.13 (Draft 2, Rev. 4) contained in WASH-1283 and WASH-1309 for evaluation of construction permit and operating license applications.

Some uncertainty has arisen with regard to the NRC staff's intent when a regulatory guide endorses, as an acceptable method for complying with certain regulations, the guidelines as well as the requirements included in a standard. As a result of this uncertainty, the NRC staff has evaluated the guidelines contained in ANSI N45.2.13-1976 with respect to importance to safety. This regulatory guide is intended to clarify the NRC's position on the requirements and guidelines contained in ANSI N45.2.13-1976. Where conformance to this regulatory guide is indicated in an application without further qualification, this means conformance with the requirements of ANSI N45.2.13-1976, as supplemented or modified by the regulatory position of this guide.

ANSI N45.2.13-1976 contains an appendix, which, although not part of the standard, provides informa-

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Comments and suggestions for improvements in these guides are encouraged at all times, and guides will be revised, as appropriate, to accommodate comments and to reflect new information or experience. This guide was revised as a result of substantive comments received from the public and additional staff review.

Comments should be sent to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch.

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tion useful in deciding how and to what extent quality assurance program requirements may be specified in procurement documents. However, a commitment to follow this guide does not require the use of the appendix.

## C. REGULATORY POSITION

The requirements that are included in ANSI N45.2.13-1976 for control of procurement of items and services for nuclear power plants are acceptable to the NRC staff and provide an adequate basis for complying with the pertinent quality assurance requirements of Appendix B to 10 CFR Part 50, subject to the following:

1. Section 1.4 of ANSI N45.2.13-1976 states that other documents that are required to be included as part of this standard will be identified at the point of reference and described in Section 13 of the standard. The specific applicability of these listed documents has been or will be covered separately in other regulatory guides or in Commission regulations where appropriate.

2. Section 1.1 of ANSI N45.2.13-1976 states: "The ASME Boiler & Pressure Vessel Code (hereafter referred to as the Code) as well as other ANSI standards, has been considered in the development of this standard, and this standard is intended to be compatible with Code requirements. This standard does not, however, apply to activities covered by Section III, Division 1 and 2, and Section XI of the Code for those activities covered by the Code." While Section III, Divisions 1 and 2, and Section XI (which addresses the control of spare and replacement parts) of the ASME Boiler and Pressure Vessel Code address general requirements for control of procurement of items and services for nuclear power plants, these sections do not explicitly address all the activities described in the ANSI N45.2.13-1976 standard. ANSI N45.2.13-1976, subject to the exceptions of the regulatory position, should be used in conjunction with the ASME Boiler and Pressure Vessel Code, Section III, Divisions 1 and 2, and Section XI for control of procurement of items and services where the ASME Code does not address the activities covered by ANSI N45.2.13-1976.

3. Section 9.3 of ANSI N45.2.13-1976 states, "The Purchaser's corrective action measures shall include verification of implementation of Supplier's corrective action system." The Purchaser should verify the implementation of the Supplier's corrective action system when such a system is required, but this verification need not be included as part of the Purchaser's corrective action measures. While Section 9.0 of ANSI N45.2.13-1976 addresses elements of the Purchaser's corrective action system, these same elements are applicable to the Supplier's corrective action system when one is required.

4. Section 10.1 of ANSI N45.2.13-1976 states that the Purchaser shall establish the method of acceptance of an item or service being furnished by the Supplier. In order for receiving inspection personnel to be aware of what methods of acceptance are established, the applicable portion of the procurement document identifying the method of acceptance of an item or service, or other documents containing the same procurement document information, should be on hand.

5. ANSI N45.2.13-1976 addresses the control of procurement of items and services that affect the quality of nuclear power plants, including spare and replacement parts. The standard, however, does not provide "requirements" specific to spare and replacement parts. Section 5.2.13 of ANSI N18.7-1976/ANS 3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," which is endorsed by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," addresses control of spare and replacement parts during the operations phase of nuclear power plants. As a result, the provisions of Section 5.2.13 of ANSI N18.7-1976 related to control of spare and replacement parts are considered applicable and should be used in conjunction with the provisions of ANSI N45.2.13-1976.

6. In addition to the requirements of the standard, the guidelines (indicated by the verb "should") identified below are considered to have sufficient safety importance to be treated the same as the requirements of the standard.

a. Section 4.2.a—The guidelines used in evaluating the Supplier's history of providing a product that performs satisfactorily in actual use.

b. Section 6.2—The guideline concerning purchaser notification points as part of pre- and post-award activities.

c. Section 10.2 (a through f)—The guidelines that specify the minimum criteria for Certificates of Conformance.

d. Section 10.3.2—The guideline concerning acceptance by receiving inspection.

e. Section 10.3.4—The guideline concerning the establishment of post-installation test requirements and acceptance documentation.

## D. IMPLEMENTATION

The purpose of this section is to provide information to applicants and licensees regarding the NRC staff's plans for using this regulatory guide. Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified

portions of the Commission's regulations, the method described herein will be used in the evaluation of submittals for construction permit and operating license applications docketed after August 1, 1977.

If an applicant wishes to use this regulatory guide in developing submittals for applications docketed on or before August 1, 1977, the pertinent portions of the application will be evaluated on the basis of this guide.

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