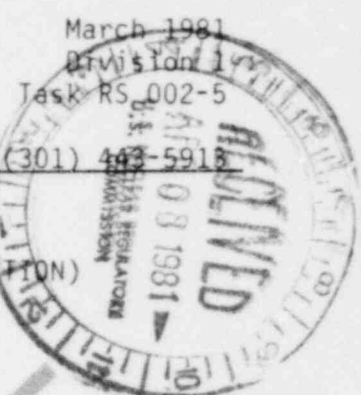




U.S. NUCLEAR REGULATORY COMMISSION
 OFFICE OF STANDARDS DEVELOPMENT
 DRAFT REGULATORY GUIDE AND VALUE/IMPACT STATEMENT



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PROPOSED REVISION 3 TO REGULATORY GUIDE 1.28
 QUALITY ASSURANCE PROGRAM REQUIREMENTS (DESIGN AND CONSTRUCTION)

A. INTRODUCTION

Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," establishes requirements for structures, systems, and components important to safety in order to provide reasonable assurance that a facility can be operated without undue risk to the health and safety of the public. Criterion 1, "Quality Standards and Records," of these general design criteria requires that a quality assurance program be established and implemented in order to provide adequate assurance that those structures, systems, and components will satisfactorily perform their safety functions.

Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 establishes quality assurance requirements for the design, construction, and operation of those structures, systems, and components that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. The criteria for the quality assurance program required by Criterion 1 of Appendix A are the criteria contained in Appendix B.* This regulatory guide describes a method acceptable to the NRC staff for complying with specified portions of the Commission's regulations with regard to quality assurance program requirements during design and construction of nuclear power plants.

B. DISCUSSION

Regulatory Guide 1.28 (Safety Guide 28) was issued in June 1972 and endorsed the general requirements and guidelines for establishing and executing a quality

*A rule is being prepared by the NRC staff that addresses this subject.

This regulatory guide and the associated value/impact statement are being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. They have not received complete staff review and do not represent an official NRC staff position.

Public comments are being solicited on both drafts, the guide (including any implementation schedule) and the value/impact statement. Comments on the value/impact statement should be accompanied by supporting data. Comments on both drafts should be sent to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, by

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assurance program during the design and construction phases of nuclear power plants provided in ANSI N45.2-1971,¹ "Quality Assurance Program Requirements for Nuclear Power Plants." This standard had been developed by Subcommittee N45-2.7 (formerly N45-3.7) of the American National Standards Committee N45, Reactor Plants and their Maintenance, and provided general requirements for establishing and executing a quality assurance program during the design, construction, and operation of nuclear power plants. ANSI N45.2-1971 was later revised to update its requirements and to expand its applicability to other nuclear facilities that were subject to Appendix B to 10 CFR Part 50. That revised standard was subsequently approved and designated ANSI N45.2-1977,¹ "Quality Assurance Program Requirements for Nuclear Facilities," by the American National Standards Institute on April 7, 1977. Revision 1 to Regulatory Guide 1.28 was issued for public comment in March 1978 and proposed endorsement with supplemental provisions of the quality assurance program requirements for the design and construction phases of nuclear power plants provided in ANSI N45.2-1977. In February 1979, Revision 2 to Regulatory Guide 1.28 was issued and, with supplemental provisions, also endorsed the quality assurance program requirements for the design and construction phases of nuclear power plants of ANSI N45.2-1977.

The American Society of Mechanical Engineers (ASME) Committee on Nuclear Quality Assurance has prepared a standard that includes requirements and guidance for the establishment and execution of quality assurance programs during the design, construction, and operation of nuclear power plants. This standard is based on the contents of ANSI/ASME N45.2-1977 and the following standards in the ANSI N45.2 series:¹

N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants"

N45.2.9, "Requirements for Collection, Storage and Maintenance of Quality Assurance Records for Nuclear Power Plants"

N45.2.10, "Quality Assurance Terms and Definitions"

¹Copies may be obtained from the American Society of Mechanical Engineers, 345 East 47th Street, New York, New York 10017.

N45.2.11, "Quality Assurance Requirements for the Design of Nuclear Power Plants"

N45.2.12, "Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants"

N45.2.13, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants"

N45.2.23, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants"

The standard that evolved was approved and designated ANSI/ASME NQA-1-1979,¹ "Quality Assurance Program Requirements for Nuclear Power Plants," by the American National Standards Institute on July 24, 1979. The standard notes that addenda are to be published up to the publication of the next edition of the standard which is expected in 1982. The NRC staff will evaluate each addendum and subsequent edition after its issuance to determine whether a revision to this guide would be appropriate.

While ANSI/ASME NQA-1-1979 provides requirements and guidance for the establishment and execution of quality assurance programs during the design, construction, and operation of nuclear power plants, this proposed Revision 3 to Regulatory Guide 1.28, with supplemental provisions, endorses only those requirements applicable to the design and construction phases. Regulatory guidance for complying with the Commission's regulations with regard to quality assurance program requirements for the operation phase is provided in Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," which endorses with supplemental provisions ANS-3.2,² "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants." Draft 5 (dated August 1980) of the revision to ANS-3.2, which is endorsed with supplemental provisions by the second proposed Revision 3 to Regulatory Guide 1.33 (dated November 1980), references ANSI/ASME NQA-1-1979 for certain operations phase

²Copies may be obtained from the American Nuclear Society, 555 North Kensington Avenue, La Grange Park, Illinois 60525.

activities. Regulatory Guide 1.33 is being revised to state that, where ANSI/ASME NQA-1-1979 is referenced by ANS-3.2, the requirements and recommendations of ANSI/ASME NQA-1-1979 should be supplemented by the provisions of the active version of this regulatory guide (1.28).

In the process of consolidating ANSI N45.2-1977 and the seven standards in the N45.2 series, the requirements and guidance provided in these standards were reorganized to a certain extent. For example, the requirements in each standard for procedures covering activities affecting quality have been consolidated into a single requirement (Basic Requirement 5). This consolidation of requirements that is discussed in each individual standard should be construed to emphasize their importance.

ANSI/ASME NQA-1-1979 has been organized to include three main sections: (1) Basic Requirements, (2) Supplements, and (3) Appendices. The organization of the Basic Requirements section is similar to that of Appendix B to 10 CFR Part 50 and sets forth basic requirements for the establishment and execution of quality assurance programs. The Supplements section amplifies the individual requirements of the Basic Requirements section. The Appendices section provides nonmandatory guidance for the establishment and execution of quality assurance programs.

When the applicant or licensee indicates conformance to the recommendations of this regulatory guide without further qualification, this means that the applicant or licensee will comply with the requirements of ANSI/ASME NQA-1-1979, as supplemented or modified by the regulatory position of this guide.

C. REGULATORY POSITION

The basic and supplementary requirements that are included in ANSI/ASME NQA-1-1979 for the establishment and execution of quality assurance programs during the design and construction phases of 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. GENERAL

ANSI/ASME NQA-1-1979 does not contain the statement that is found in a number of the ANSI N45.2-series standards excluding activities covered by the ASME Boiler and Pressure Vessel Code,¹ Section III, Divisions 1 and 2 and Section XI from the requirements of the standard. The NRC staff considers that ANSI/ASME NQA-1-1979 should be used, subject to the regulatory positions of this guide, in conjunction with the ASME Boiler and Pressure Vessel Code where the Code does not address the activities covered by ANSI/ASME NQA-1-1979 in sufficient detail to satisfy the pertinent quality assurance requirements of Appendix B to 10 CFR Part 50. These activities include, for example, the following:

- a. Qualification of inspection and test personnel
- b. Qualification of quality assurance program audit personnel
- c. Design control
- d. Procurement document control
- e. Control of purchased items and services, and
- f. Audits.

2. QUALIFICATION OF INSPECTION AND TEST PERSONNEL

2.1 Appendix 2A-1

Appendix 2A-1, "Nonmandatory Guidance on the Qualifications of Inspection and Test Personnel," provides guidance for personnel capability and education and experience qualifications. The provisions of Appendix 2A-1 should be met as part of Supplement 2S-1, "Supplementary Requirements for the Qualification of Inspection and Test Personnel," subject to the following:

- a. Section 2.3, "Level III Personnel Capabilities," of Appendix 2A-1 describes the recommended capabilities of Level III inspection and test personnel.

In addition, the Level III individual should be capable of reviewing and approving inspection, examination, and testing procedures and of evaluating the adequacy of such procedures to accomplish the inspection, examination, and test objectives. For qualification of personnel who (1) approve preoperational, startup, and operational test procedures and test results or (2) direct or supervise the conduct of individual preoperational, startup, and operational tests, the guidelines contained in Regulatory Guide 1.8, "Personnel Selection and Training,"³ should be followed in lieu of the guidelines in ANSI/ASME NQA-1-1979.

b. Section 3.0, "Education and Experience Qualifications," of Appendix 2A-1 specifies a set of education and experience recommendations and states that factors other than those specified may provide reasonable assurance that a person can competently perform a particular task. In addition, a candidate for Level I, II, or III certification should be a high school graduate or should have earned the General Education Development equivalence of a high school diploma.

2.2 Supplement 2S-1

a. Section 2.5, "Determination of Initial Capability," of Supplement 2S-1, "Supplementary Requirements for the Qualification of Inspection and Test Personnel," discusses an evaluation of a candidate's education, experience, and training to establish an individual's capabilities. Determination of capability based on an evaluation other than education and experience requirements should result in documented objective evidence (i.e., a record of written test or capability demonstration) verifying that the individual does have the necessary competence.

For a Level I individual with a limited inspection and test responsibility, documented objective evidence that the individual received adequate training and sufficient education to perform a particular assigned task, including understanding of its purpose and objective, may be used to satisfy the education provisions of Regulatory Position 2.1.b. (i.e., a high school diploma or a General Education Development certificate) to perform that particular task. All other Level

³In response to the lessons learned from the Three Mile Island accident, public comments, and additional staff review, second proposed Revision 2 to Regulatory Guide 1.8 (Task RS 807-5) entitled "Personnel Qualification and Training" and its draft value impact statement were issued in September 1980 for public comment.

I and all Level II and Level III personnel should be high school graduates or have earned the General Education Development certificate as discussed in Regulatory Position 2.1.b.

b. The important concept that occupational radiation exposure should be maintained as low as is reasonably achievable (ALARA) is not addressed directly in Supplement 2S-1. In all cases during design and construction when inspection, examination, and testing personnel may be exposed to radiation fields during their activities, these personnel should receive instruction in radiation protection and radiation-dose-reduction considerations related to work they are expected to perform. Regulatory Guide 8.8, "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable," describes techniques, features, and guidance to maintain occupational exposures ALARA.

3. EDUCATION AND EXPERIENCE OF LEAD AUDITORS

Appendix 2A-3, "Nonmandatory Guidance on the Education and Experience of Lead Auditors," provides guidance for education and experience qualifications of Lead Auditors. The provisions of Appendix 2A-3 should be met as part of Supplement 2S-3, "Supplementary Requirements for Qualification of Quality Assurance Program Audit Personnel."

4. DESIGN CONTROL

4.1 Supplement 3S-1

a. Section 4.2.1, "Design Reviews," of Supplement 3S-1, "Supplementary Requirements for Design Control," lists six items to be addressed in the design review process. In addition to the six items listed in Supplement 3S-1, the following items should be addressed in the design review process:

- (1) Are the appropriate quality requirements and quality assurance requirements specified?

- (2) Are the applicable codes, standards, and regulatory requirements, including issue and addenda, properly identified, and are their requirements for design met?
- (3) Has applicable construction and operating experience been considered?
- (4) Have the design interface requirements been satisfied?
- (5) Are the specified parts, equipment, and processes suitable for the required application?
- (6) Are the specified materials compatible with each other and the design environmental conditions to which the material will be exposed?
- (7) Have adequate maintenance features and requirements been specified?
- (8) Are accessibility and other design provisions adequate for performance of needed maintenance and repair?
- (9) Has adequate accessibility been provided to perform the inservice inspection expected to be required during the plant life?
- (10) Has the design properly considered radiation exposure to the public and plant personnel?
- (11) Are the acceptance criteria incorporated in the design documents sufficient to allow verification that design requirements have been satisfactorily accomplished?
- (12) Have adequate preoperational and subsequent periodic test requirements been appropriately specified?
- (13) Are adequate handling, storage, cleaning, and shipping requirements specified?

(14) Are adequate identification requirements specified?

(15) Are requirements for record preparation, review, approval, retention, etc., adequately specified?

b. The items listed in Section 4.2.1 of Supplement 3S-1 and those listed in 4.1.a above should also be addressed for those designs that are verified by means other than design review (for example, alternative calculations or qualification tests).

c. Section 4.0, "Design Verification," of Supplement 3S-1 requires that the results of design verification be clearly documented. Measures should be taken to ensure that the findings of the design verification are implemented.

d. In addition to the requirements of Section 4.0, "Design Verification," of Supplement 3S-1, the use of the designer's immediate supervisor to perform design verification should be limited to those cases where (1) the supervisor is the only technically qualified individual, (2) the need is individually documented and approved in advance by the supervisor's management, and (3) quality assurance audits cover frequency and effectiveness of use of supervisors as design verifiers to guard against abuse. While design verification by the designer's immediate supervisor is encouraged, it should not be construed that such verification normally constitutes the required independent design verification, nor should the independent design verification be construed to dilute or replace the clear responsibility of supervisors for the quality of work performed under their supervision.

e. Verification of original designs and changes to designs should be performed in a timely manner. Design verification, if other than by qualification testing of a prototype or lead production unit, should be satisfactorily completed prior to (1) release for procurement, manufacture, and construction or (2) release to another organization for use in other design activities except in those cases where this timing cannot be met. In those cases where this timing cannot be met, the design verification may be deferred, provided the justification for this action is documented and the unverified portion of the design output document and all design output documents based on the unverified data are appropriately identified and controlled. Construction site activities associated with an unverified design or design change should not proceed without

verification past the point where the installation would become irreversible (i.e., require extensive demolition and rework). In all cases, the design verification should be complete prior to fuel load.

f. Section 5.0, "Change Control," of Supplement 3S-1 discusses design control measures for changes to final designs. In addition, controls should ensure that documents that are designated to become quality assurance records accurately reflect the as-built (i.e., analyzed, designed, fabricated, installed, and tested) condition of the nuclear power plant.

4.2 Appendix 3A-1

Section 5.0, "Design Input," of Appendix 3A-1, "Nonmandatory Guidance on Design Control," includes a list of recommended inputs. The list of design inputs developed under Section 2.0 "Design Input," of Supplement 3S-1 should include, but is not limited to, the provisions of Section 5.0 of Appendix 3A-1 where applicable to a design.

5. DOCUMENT CONTROL

Section 2.0, "Document Preparation, Approval and Issue," of Supplement 6S-1, "Supplementary Requirements for Document Control," contains a list of document controls. Item (c) of the list should be modified and an item (d) added to read as follows:

"(c) review of documents for adequacy, completeness, legibility, and correctness prior to approval and issuance,

"(d) distribution of documents."

6. CONTROL OF PURCHASED ITEMS AND SERVICES

a. Section 2.1, "Performance History," of Appendix 7A-1, "Nonmandatory Guidance for Control of Purchased Items and Services," recommends specific information to be used in evaluating the Supplier's history of providing a product that performs satisfactorily in actual use. The specific information listed as Items (a) and (b) in Section 2.1 of Appendix 7A-1 should be considered part of the evaluation required in Section 3.1, "Source Evaluation and

Selection," of Supplement 7S-1, "Supplementary Requirements for Control of Purchased Items and Services."

b. Section 2.3, "Facility Survey," of Appendix 7A-1 recommends the evaluation of the Supplier's technical and quality capability. This evaluation is stated as a requirement in Item (c) of Section 3.1, "Source Evaluation and Selection," of Supplement 7S-1 and should be met as such.

c. Section 4.2, "Receiving Inspection," of Appendix 7A-1 provides guidance concerning when the use of receiving inspections only for acceptance of items or services is allowable. The provisions of Section 4.2 of Appendix 7A-1 should be met as part of Supplement 7S-1. In addition, Section 4.2.1 of Appendix 7A-1 should be interpreted to include only items or services that are relatively simple and standard in design and to manufacture and test.

d. Section 4.4, "Post-Installation Testing," of Appendix 7A-1 discusses the conditions under which product acceptance by post-installation test is satisfactory. The provisions of Section 4.4 of Appendix 7A-1 should be met as part of Section 8.2.4 of Supplement 7S-1.

7. QUALITY ASSURANCE RECORDS

7.1 Supplement 17S-1

a. Section 2.2, "Generation of Records," of Supplement 17S-1, "Supplementary Requirements for Quality Assurance Records," contains requirements related to generation of records to ensure that adequate documentary evidence of quality is available upon completion of the work. In addition to the requirements of the last sentence of this section, which impose legibility and accuracy requirements for documents designated as records, documents that are designated to become quality assurance records should also be legible, accurate, and appropriately completed for the work that has been completed.

b. Section 2.8, "Retention of Records," of Supplement 17S-1 states that the retention period for nonpermanent records is required to be established in writing. Programmatic nonpermanent records⁴ should be retained for 3 years

⁴Programmatic nonpermanent records are those documents that were used to prescribe activities affecting quality, but which are not considered permanent records. Such records include documents prescribing the planning, execution, and auditing of activities affecting quality.

and product nonpermanent records⁵ should be retained for 10 years. For nonpermanent records generated prior to commencement of commercial operation, the retention period should be considered to begin on the date of commercial operation of the nuclear power plant.

c. Section 4.3, "Safekeeping," of Supplement 17S-1 contains requirements related to actions to be accomplished in the event that a record is lost or damaged and requires "prompt" record replacement. These actions should be accomplished within 30 days after the determination that either (1) a record has been lost or (2) a record has been damaged to a degree that it is no longer complete or legible.

d. Supplement 17S-1 does not address storage, preservation, or safekeeping of records for the period subsequent to record completion but prior to the time the record is stored in the record storage facility. The written procedures that define, implement, and enforce the records systems shall identify by record type (1) the maximum allowable time between record completion and the time the record is placed in the record storage facility defined in Sections 4.4.1, "Single Facility," or 4.4.2, "Dual Facilities," of Supplement 17S-1 and (2) the measures to be implemented for the storage, preservation, and safekeeping of the records prior to storage.

e. Section 4.4.1, "Single Facility," of Supplement 17S-1 includes criteria for the design and construction of a single facility for the storage of quality assurance records. The following criteria are acceptable alternatives to the criteria of Section 4.4.1:

- (1) A two-hour vault meeting NFPA 232-1975,⁶ or
- (2) Two-hour Class B file containers meeting the requirements of NFPA-232, or

⁵Product nonpermanent records document that specific structures, systems, and components of a nuclear power plant have been designed and constructed in accordance with applicable requirements. These records include design verification data, receiving records, calibration records, maintenance records, inspection, and test records.

⁶NFPA 232-1975 is contained in Volume 9 of the National Fire Codes published annually by the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.

- (3) A two-hour fire room meeting the requirements of NFPA-232 with the following additional provisions:
 - (a) Early warning fire detection and automatic fire suppression capability with electronic supervision at a constantly attended central station.
 - (b) Records storage in fully enclosed metal cabinets.
 - (c) Adequate access and aisle ways.
 - (d) Prohibition in the room of work not directly associated with record storage or retrieval.
 - (e) Prohibition in the room of smoking, eating, or drinking.
 - (f) Two-hour dampers or doors in all boundary penetrations.

7.2 Appendix 17A-1

a. Section 3.0, "List of Typical Lifetime Records," of Appendix 17A-1, "Nonmandatory Guidance on Quality Assurance Records," provides a list of typical lifetime records. The provisions of Section 3.0 of Appendix 17A-1 concerning design and construction records should be met as part of Supplement 17S-1. Also, the following records should be listed in the indicated sections of Appendix 17A-1:

- 3.3 Radiographs
- 3.4.3 Radiographs

b. Sections 3.3, "Manufacturing Records," and 3.4, "Installation Construction Records," of Appendix 17A-1 list "as-built" drawings and records as typical lifetime records. These as-built drawings and records should correctly identify the installed condition of the structure, system, or component and should be in a form that can be effectively used by the plant owner during safety evaluations of plant operating conditions. The types of as-built drawings and records that are required to be maintained at the operating plant should be specified.

8. AUDITS

8.1 Supplement 18S-1

8.1.1 Audit Team Leader

In addition to the provisions of Supplement 18S-1, "Supplementary Requirements for Audits," the audit team leader should be a lead auditor qualified in accordance with Regulatory Position 4 of this guide.

8.1.2 Performance

Section 4.0, "Performance," of Supplement 18S-1 provides guidance for the correct performance of audits. In addition, specific attention should be given to corrective action on program deficiencies in the area being audited that were identified during previous audits.

8.1.3 Records

Section 8.0, "Records," of Supplement 18S-1 states that audit records shall include audit plans, audit reports, written replies, and the record of completion of corrective action. Audit plans should include any audit procedures or blank checklists associated with an audit. A document that indicates the extent of completion of the audit and the audit results for each completed audit plan item should be maintained as an audit record.

8.1.4 Scheduling

Section 2.0, "Scheduling," of Supplement 18S-1 requires audits to be scheduled in a manner that provides coverage and coordination with ongoing quality assurance program activities. The following is considered acceptable in scheduling audits:

a. Internal Audits

Applicable elements of an organization's quality assurance program should be audited at least annually or at least once within the life of the activity, whichever is shorter. In determining the scope of the audit, an evaluation of the area being audited may be useful. The evaluation may include results of prior quality assurance program audits and the results of audits from other

sources, including the nature and frequency of identified deficiencies and any significant changes in personnel, organization, or quality assurance program.

b. External Audits

1. After the award of a contract, external audits are not necessary for procuring items or services that are as follows:

- (a) Relatively simple and standard both in design and for manufacturing and testing, and
- (b) Adaptable to standard or automated inspections or tests of the end product to verify quality characteristics after delivery, and
- (c) Of a nature that receiving inspection does not require operations which could adversely affect the integrity, function, or cleanness of the item.

2. For other procurement actions not listed in paragraph b.1 of Regulatory Position 8.1.4 above, audits should be conducted as described below:

(a) Elements of a supplier's quality assurance program should be audited by the purchaser on a triennial basis with the audit implemented in accordance with Supplement 18S-1 of ANSI/ASME NQA-1-1979. The triennial period should begin with performance of an audit when sufficient work is in progress to demonstrate that the organization is implementing a Quality Assurance Program having the required scope for purchases placed during the triennial period. When a subsequent contract or a contract modification that significantly enlarges the scope of activities performed by the same supplier is executed, an audit should be conducted to the increased requirements, thus starting a new triennial period. If, at the time of the pre-award survey, the supplier is already implementing the same quality assurance program for other customers which he proposes to use on the auditing party's contract, then the pre-award survey, if it was conducted in accordance with the requirements of ANSI/ASME NQA-1-1979, may serve as the first triennial audit. Therefore, when such pre-award surveys are employed as the first triennial audits, those surveys should satisfy the same audit elements and criteria as used on other triennial audits.

(b) A documented evaluation of the supplier should be performed annually. Where applicable, this evaluation should take into account (1) review of supplier-furnished documents and records such as certificates of conformance, non-conformance notices, and corrective actions, (2) results of previous source verifications, audits, and receiving inspections, (3) operating experience of identical or similar products furnished by the same supplier, and (4) results of audits from other sources, e.g., customer, ASME, or NRC audits.

(c) When more than one purchaser buys from a single supplier, a purchaser may perform an audit of the supplier on behalf of more than one purchaser in order to reduce the number of external audits of the supplier. The scope of this audit should satisfy all purchaser needs and the report of this audit should be distributed to all purchasers for whom the audit was conducted.

8.2 Appendix 18A-1

8.2.1 Scheduling

Section 2.3, "Scheduling," of Appendix 18A-1, "Nonmandatory Guidance on Audits," recommends reasons for the supplement of regularly scheduled audits by additional audits. The provisions of Items (c) through (e) of Section 2.3 of Appendix 18A-1 should be met as part of Supplement 18S-1. The performance of a supplementary external audit may be considered to begin a new triennial period in accordance with paragraph b.2 of Regulatory Position 8.1.4 of this guide.

8.2.2 Post-Audit Conferences

Post-audit conferences should be conducted in accordance with Appendix 18A-1.

D. IMPLEMENTATION

This proposed guide has been released to encourage public participation in its development. Except in those cases in which an applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the method to be described in the active guide

reflecting public comments will be used in the evaluation of (1) all construction permit and operating license applications, (2) standard reference system preliminary design applications (PDA) or Type-2 final design applications (FDA-2), and (3) licenses to manufacture docketed after the implementation date to be specified in the active guide. This implementation date to be specified in the active guide will in no case be earlier than September 1981.

The NRC staff does not intend to issue revisions to those regulatory guides that have been consolidated into this regulatory guide. Therefore, new applications docketed after the effective implementation date of this guide will be evaluated against the latest revision to this regulatory guide instead of against those guides that will no longer be maintained (updated); i.e., Regulatory Guides 1.58, "Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel"; 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants"; 1.74, "Quality Assurance Terms and Definitions"; 1.88, "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records"; 1.123, "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants"; 1.144, "Auditing of Quality Assurance Programs for Nuclear Power Plants"; and 1.146, "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants."

When an applicant or licensee has committed to the recommendations of this regulatory guide, the applicant or licensee is responsible for ensuring that the requirements of ANSI/ASME NQA-1-1979, as supplemented or modified by the regulatory position of this guide, are met, to the extent necessary in procurement documents, by the suppliers.