

QUALITY ASSURANCE PROCEDURE



Franklin Research Center

A Division of The Franklin Institute

20th and Race Streets, Phila., Pa. 19103 (215) 448-1000

QUALITY ASSURANCE PROCEDURE

TITLE QUALIFICATION OF QUALITY
ASSURANCE AUDIT PERSONNEL

QAP No. 4-1

Page 1 of 5

Date
Issued 9/1/83

Effective
Date

Revision
Number 0

Review
Date

☒ Prepared

A. J. Saggiomo

☒ Approved

A. J. Saggiomo

Concurred
By

T. S. Heumann

1.0 PURPOSE

- 1.1 This procedure provides requirements for the qualification of auditors, including Lead Auditor, in order to ensure that personnel selected for auditing assignments have appropriate training and experience.
- 1.2 This procedure implements Section 4 of the Quality Assurance Manual and the supporting QASD No. 4-1.

2.0 RESPONSIBILITIES

- 2.1 The Quality Assurance Manager shall establish the qualification requirements of audit personnel, and shall ensure that personnel selected for Quality Assurance auditing assignments are qualified in accordance with this procedure. He shall be responsible for the maintenance of auditor qualification records, and their storage in the QA records safe.
- 2.2 The President of the Franklin Research Center (FRC), or a designated Vice President, is responsible for certifying the qualification of a Lead Auditor.

3.0 DEFINITIONS

- 3.1 Auditor is any individual who performs any portion of an audit, and includes Lead Auditors, technical specialists, management representatives, and auditors-in-training.
- 3.2 Lead Auditor is the audit team leader who organizes and directs audits, reports audit findings, and evaluates corrective actions.

4.0 INSTRUCTIONS

- 4.1 Audit personnel shall be independent of any direct responsibility for performance of the activities which they will audit.
- 4.2 Auditors shall have, or be given, appropriate training such as QA courses, seminars, in-house training, etc.; or orientation to develop their competence for performing required audits.
- 4.3 Competence of personnel for various audit functions shall be developed by one or more of the following methods:

- 4.3.1 Orientation to provide a working knowledge and understanding of audit procedures and reporting.
 - 4.3.2 General training in the fundamentals, objectives, characteristics, organization, performance, and results of quality auditing.
 - 4.3.3 Specialized training in the methods of examining, questioning, evaluating, documenting audit items, and closing out audit findings.
 - 4.3.4 On-the-job training, guidance, and counseling under the direct supervision of a Lead Auditor. Such training shall include planning, performing, reporting and follow-up action involved in conducting audits.
- 4.4 Specific requirements for Lead Auditor qualification are set forth as follows:
- 4.4.1 The prospective Lead Auditor shall have verifiable evidence that a minimum of ten (10) credits under the following score system have been accumulated.
 - a. Education (4 Credits Maximum)

Associate degree from an accredited institution score one (1) credit or if the degree is in engineering, physical sciences, mathematics, or quality assurance, score two (2) credits; or

A bachelor's degree from an accredited institution score two (2) credits or if the degree is in engineering, physical sciences, mathematics, or quality assurance, score three (3) credits; in addition, score one (1) credit for a master's degree in engineering, physical sciences, business management, or quality assurance from an accredited institution.
 - b. Experience (9 Credits Maximum)

Technical experience in engineering, manufacturing, construction, operation, or maintenance, score one (1) credit for each full year with a maximum of five (5) credits for this aspect of experience.

If two (2) years of this experience have been in the nuclear field, score one (1) additional credit; or

If two (2) years of this experience have been in quality assurance, score two (2) additional credits; or

If two (2) years of this experience have been in auditing, score three (3) additional credits; or

If two (2) years of this experience have been in nuclear quality assurance, score three (3) additional credits; or

If two (2) years of this experience have been in nuclear quality assurance auditing, score four (4) additional credits.

c. Other Credentials of Professional Competence (2 Credits Maximum)

For certification of competency in engineering, science, or quality assurance specialties issued and approved by a State Agency or National Professional or Technical Society, score two (2) credits.

d. Rights of Management (2 Credits Maximum)

The Lead Auditor's employer may grant up to two (2) credits for other performance factors applicable to auditing which may not be explicitly called out in this procedure. Examples of these factors are leadership, sound judgment, maturity, analytical ability, tenacity, past performance, and quality assurance training courses.

4.4.2 The prospective Lead Auditor shall have capability to communicate effectively, both in writing and orally. These skills shall be attested to in writing by FRC management.

4.4.3 Prospective Lead Auditors shall have training to the extent necessary to assure their competence in auditing skills. Training in the following areas shall be provided based upon management evaluation of the particular needs of each prospective Lead Auditor.

- a. Knowledge and understanding of nuclear-related codes, standards, regulations, and regulatory guides, as applicable.
- b. General structure of quality assurance programs as a whole and applicable elements.
- c. Auditing techniques of examining, questioning, evaluating, and reporting; methods of identifying and following up on corrective action items; and closing out audit findings.
- d. Audit planning in the quality-related functions for the following activities: design, purchase, fabrication, handling, shipping, storage, cleaning, erection, installation, inspection, testing, statistics, nondestructive examination, maintenance, repair, operation, modification of nuclear facilities or associated components, and safety aspects of the nuclear facility.
- e. On-the-job training to include applicable elements of the audit program.

4.4.4 The prospective Lead Auditor shall have participated in a minimum of five (5) quality assurance audits within a period of time not to exceed three (3) years prior to the date of qualification, one audit of which shall be a nuclear quality assurance audit within the year prior to his qualification.

4.4.5 The prospective Lead Auditor shall pass an examination given by management which shall evaluate his comprehension of and ability to apply the body of knowledge identified in 4.4.3 above. The test may be oral, written, practical, or any combination of the three types.

4.5 Maintenance of Lead Auditor Qualification

4.5.1 Lead Auditors shall maintain their proficiency through: regular and active participation in the audit process; review and study of codes, standards, procedures, instructions, and other documents related to quality assurance program and program auditing; and participation in training programs. Based on annual assessment, management may extend the qualification, require retraining, or require requalification. These evaluations shall be documented.

4.5.2 Lead Auditors who fail to maintain their proficiency for a period of two years or more shall require requalification. Requalification shall include retraining in accordance with the requirements of 4.4.3 above, reexamination in accordance with 4.4.5 above, and participation as an Auditor in at least one nuclear quality assurance audit.

4.6 Records of personnel qualifications for Auditors and Lead Auditors shall be established and maintained using the Record of Lead Auditor Qualification form (Exhibit I). Lead Auditor records shall be updated annually, and stored in the QA Records Safe.

4.7 Each Lead Auditor shall be certified by the President of FRC, or a designated Vice President.

5.0 CROSS REFERENCES

5.1 Quality Assurance Manual - Section 4 and QASD No. 4-1.

5.2 ANSI/ASME N45.2.23 (1978) - Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants.

6.0 COUNSEL AND REVIEW CONTACT

6.1 Manager of Quality Assurance

7.0 DISTRIBUTION

7.1 FRC President

7.2 Manager of Quality Assurance

7.3 Auditors

EXHIBIT I

RECORD OF LEAD AUDITOR QUALIFICATION		Name	Date
EMPLOYER:			
QUALIFICATION POINT REQUIREMENTS			CREDITS
Education — University/Degree Date		4 Credits Max.	_____
1. Undergraduate Level 2. Graduate Level			
Experience — Company/Dates		9 Credits Max.	_____
Technical (0–5 credits) and Nuclear Industry (0–1 credit), or Quality Assurance (0–2 credits), or Auditing (0–4 credits)			
Professional Accomplishment — Certificate/Date		2 Credits Max.	_____
1. P.E. 2. Society			
Management — Justification/Evaluator/Date		2 Credits Max.	_____
Explain:			
Evaluated by: (Name and Title)		_____	_____
		Date	
		Total Credits:	_____
AUDIT COMMUNICATION SKILLS			
Evaluated by: (Name and Title)		_____	_____
		Date	
AUDIT TRAINING COURSES			
Course Title or Topic:		Date	
1.			
2.			
AUDIT PARTICIPATION			
	Location	Audit	Date
1.			
2.			
3.			
4.			
5.			
EXAMINATION:		PASSED:	DATE:
AUDITOR QUALIFICATION CERTIFIED BY:		Date Certified	
(Signature and Title)			
ANNUAL EVALUATION			
(Signature and Date)			