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>>>>>> NUQAP TOPICAL REPORT REVISION DISTRIBUTION <<<<<<<

DATE: 02/10/95

TO: DOCUMENT CONTROL DESK
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WASHINGTON DC 20553

TRANSMITTAL# QAT-95-4062

FROM: NUCLEAR DOCUMENT SERVICES
MP BLDG 475 (203)447-1791

SUBJECT: NUQAP TOPICAL REPORT REVISION

THE ATTACHED NUQAP TOPICAL REPORT REVISION,
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DOCUMENT. PLEASE SIGN BELOW TO ACKNOWLEDGE RECEIPT OF THIS REVISION
AND TO VERIFY THAT YOU WILL INCORPORATE THIS REVISION INTO YOUR
CONTROLLED DOCUMENT AS SOON AS POSSIBLE. RETURN THIS FORM TO
BETH MEIER (X2443), NDS, MP B475, FL3, AS SOON AS RECEIVED.
RECEIPTS RECEIVED AFTER * 03/10/95 * ARE CONSIDERED LATE.
*** PLEASE RETURN RECEIPTS BEFORE THIS DATE. *** THANK YOU.

SIGNATURE _____

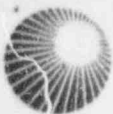
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Memo

February 9, 1995
QAS-95-4062

TO: NUQAP Topical Report Copyholders
FROM: Rick Paliuca, QAS (Extension 6767 MP)
SUBJECT: Update to NUQAP Topical Report, Revision 17

Enclosed are approved changes to the Topical Report from the third quarter of 1994. Please keep these with your controlled copy.

These changes will be included in Revision 18 which will be submitted to the NRC by June 10, 1995 for acceptance.

Call me if you have questions.

Transmittal No. QAT-95-4062

OCT- 5-94 WED 9:58

QAS

FAX NO. 2034375815

P.01

FIGURE 7.2

NORTHEAST UTILITIES QUALITY ASSURANCE PROGRAM TOPICAL REPORT

CHANGE REQUEST FORM
SAMPLERequest No. 95-1Date 10/5/94Requestor William A. LacyI. PROPOSED REVISION1. GENERAL DESCRIPTION OF CHANGE

Section/Appendix F Paragraph No. 16 Rev. No. 17
SEE ATTACHED #8 EXCEPTION. This revises previous change 94-28.
MP2 Technical Specification have been revised to reflect this change.

2. PURPOSE OF CHANGE

An exception is needed from ANSI A18.1-1971 to reflect that an
Operations Manager for MP2 does not need to hold a current BRO
License on Unit 2.

3. NEO PROCEDURES AFFECTED
(see NEO 1.04)☐ New☐ Revised☒ No

Concurrence

Director

(If NEO Procedure(s) are not affected, the completion of Section II.A is not required.)

II.A PRINCIPAL PRB MEMBER/NEO RESPONSIBLE INDIVIDUAL REVIEWS1. PRINCIPAL PRB MEMBER
COMMENTS:☐ Approval☐ Disapproval

Signature

N/A

Date

2. NEO RI
COMMENTS:☐ Approval☐ Disapproval

Signature

N/A

Date

OCT- 5-94 WED 8:57 QAS

FAX NO. 2034375915

P.02

II.B QAS REVIEW

1. ARE THERE OTHER SECTIONS OF THE TOPICAL REPORT AFFECTED?

☒ NO ☐ YES (LIST) _____

2. DOES THE PROPOSED CHANGE REDUCE COMMITMENTS OF THE QA PROGRAM?

☒ NO ☐ YES (SPECIFY) _____

3. THE PROPOSED CHANGE AFFECTS:

☐ CONNECTICUT YANKEE ☒ MILLSTONE UNITS ~~at~~ 2 only
☐ ALL UNITS

OTHER COMMENTS: See Attachment 1

R. Palmer
QAS Reviewer Date 10/5/94

☒ Approved☐ Disapproved

Joseph M. Symon
Director-QAS Date 10/5/94

☒ Approved☐ Disapproved

OCT- 5-94 WED 8:57 QAS

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P.03

NUQUAT TOPICAL REPORT CHANGE REQUEST

Attachment to NEO 3.08 Form
Page 1 of 1

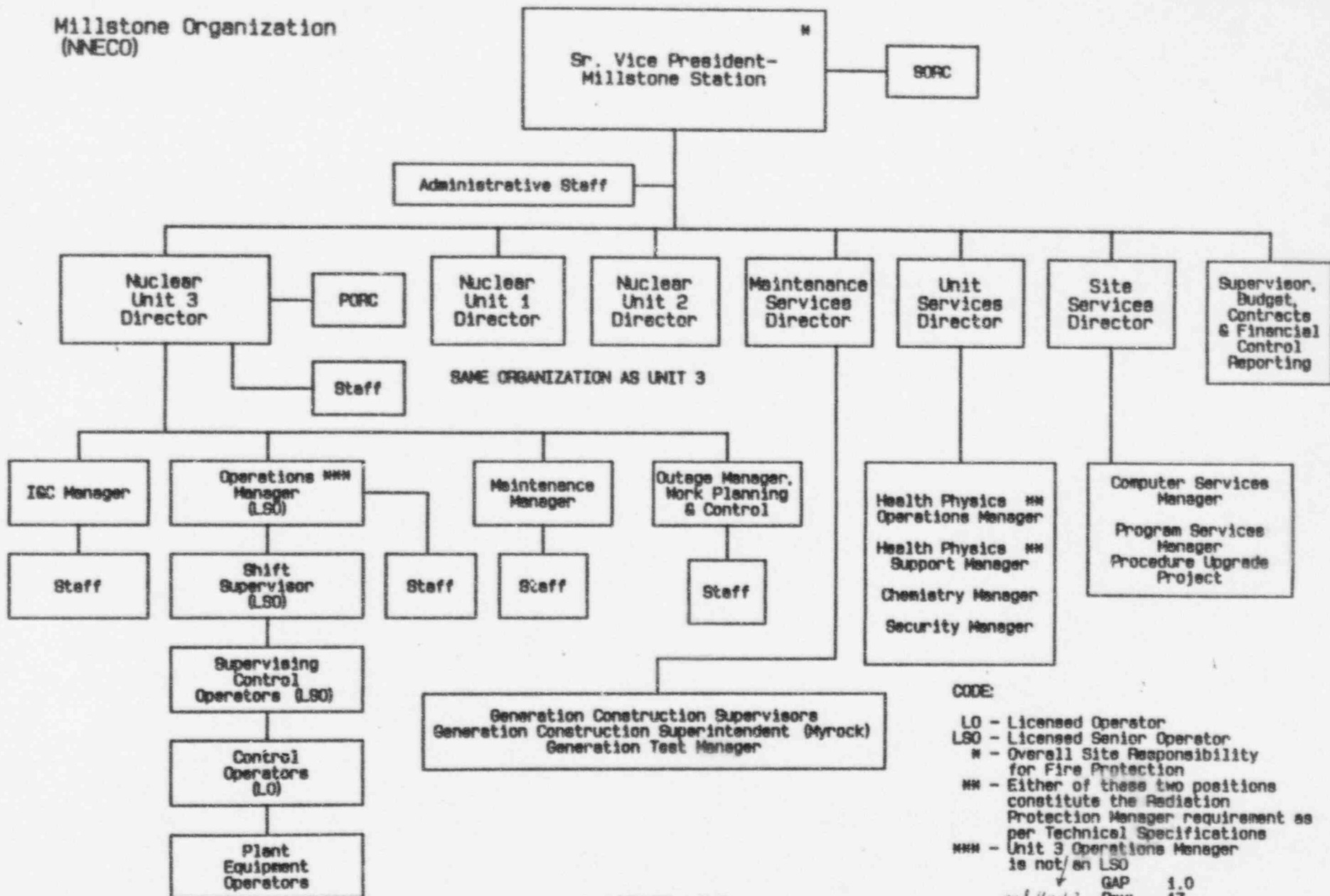
- We recognize that our commitment was to an earlier ANSI standard which did not identify any alternate method to the Operations Manager holding an operating license on the Unit.
- The later revision of ANSI/ANS 3.1 does allow for an alternative, which we now would invoke.
- Therefore, this is a change in our commitment, but it does not reduce our commitment from a quality perspective.

8. ANSI N18.1-1971, paragraph 4.2.2, states in part, "The Operations Manager shall hold a Senior Reactor Operator's License."

NU has developed an alternative to this requirement for the Millstone Unit No. 2 License which allows the Assistant Operations Manager to hold the SRO License if the Operations Manager has been certified in accordance with section 4.2.2 of ANSI/ANS 3.1-1987.

This alternate would only be available for the next three years. This assumes the Operations Manager gets a license or is replaced with a Manager who has the license, before the three year limitation expires.

Millstone Organization
(NNECO)



CODE:

- LO - Licensed Operator
- LSO - Licensed Senior Operator
- * - Overall Site Responsibility for Fire Protection
- MM - Either of these two positions constitute the Radiation Protection Manager requirement as per Technical Specifications
- MMN - Unit 3 Operations Manager is not an LSO

and Unit 2

GAP 1.0

Rev: 17

Date: August 10, 1994

FIGURE 1.5.8

FIGURE 7.2

NORTHEAST UTILITIES QUALITY ASSURANCE PROGRAM TOPICAL REPORT

CHANGE REQUEST FORM

Request No. 95-2

Date October 12, 1994

Requestor D. D. McCary

I. PROPOSED REVISION

1. GENERAL DESCRIPTION OF CHANGE

Section/Appendix _____ Paragraph No. _____ Rev. No. _____

See Attached Pages.

2. PURPOSE OF CHANGE 1. Relocation of Procurement Quality Services to the Nuclear Production Materials Department. 2. To remove QAS from line responsibility of reviewing contractor certifications prior to the start of work, and putting the responsibility on the user department. This is a corrective action for a finding identified in audit A60539.

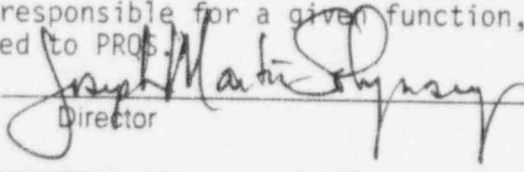
3. NEO PROCEDURES AFFECTED

☐ New

☒ Revised

☐ No

(see NEO 1.04) Nuclear Group Roles and Responsibilities. NGP 3.14 and most 600 Series NGPs. (These changes will be minor and are mainly associated with which organization will be responsible for a given function, that is most references to QAS will have to be revised to PROS.)

Concurrence 
Director

(If NEO Procedure(s) are not affected, the completion of Section II.A is not required.)

II.A PRINCIPAL PRB MEMBER/NEO RESPONSIBLE INDIVIDUAL REVIEWS

1. PRINCIPAL PRB MEMBER

COMMENTS:

☐ Approval

☐ Disapproval

Signature _____

Date _____

2. NEO RI

COMMENTS:

☐ Approval

☐ Disapproval

Signature _____

Date _____

FIGURE 7.2

SUPPLEMENT TO TOPICAL REPORT CHANGE REQUEST FORM

October 12, 1994

Requestor: D. D. McCory

1. PROPOSED REVISION

GENERAL DESCRIPTION OF CHANGE

See attached pages, revisions marked in red.

Section/Appendix	1.0	Paragraph No.	1.4.2.1
		Figure	1.4
		Figure	1.5
	2.0		2.2.4
			2.2.5
	3.0		3.2
	4.0		4.2.1
			4.2.3
	5.0		5.2
	6.0		6.2.1
			6.2.2
			6.2.3
			6.2.4
	7.0		7.2.1
			7.2.2
			7.2.3
			7.2.4
			7.2.5
	8.0		8.2
	9.0		9.2
			9.2.2
	10.0		10.2.1
	11.0		11.2.1
			11.2.4
	12.0		12.2.1
	13.0		13.2.1

FIGURE 7.2

SUPPLEMENT TO TOPICAL REPORT CHANGE REQUEST FORM

October 12, 1994

Requestor: D. D. McCorry

1. PROPOSED REVISION

GENERAL DESCRIPTION OF CHANGE

See attached pages, revisions marked in red.

Section/Appendix	14.0	Paragraph No.	14.2.1
	15.0		15.2.2
	17.0		17.2
	18.0		18.2.1

C

1.4.2 The Vice President-Nuclear, Operations Services is responsible for Nuclear Production Materials, Quality Services, Emergency Preparedness, Nuclear Maintenance Programs, and Nuclear Training. The following department Directors report to the Vice President-Nuclear, Operations Services (see Figure 1.4):

** vendor approval and oversight, receipt inspection,*

1.4.2.1 The Director-Nuclear Production Materials is responsible for parts, materials, ~~and~~ records support services, *and procurement of equipment and material* as required for NUSCO/NUPOC Departments during the design, modification, maintenance, construction, and operation of nuclear power plants.

1.4.2.2 The Director-Quality Services is responsible for the preparation and issuance of the NUQAP Topical Report, and verification of the implementation of its requirements by the applicable NUSCO/NUPOC Departments. Verification is performed by a planned program of audits, surveillance, and inspections by the Quality Services Sections. He provides management with objective evidence of the performance of activities affecting quality, independent of the individual or group directly responsible for performing the specific activity.

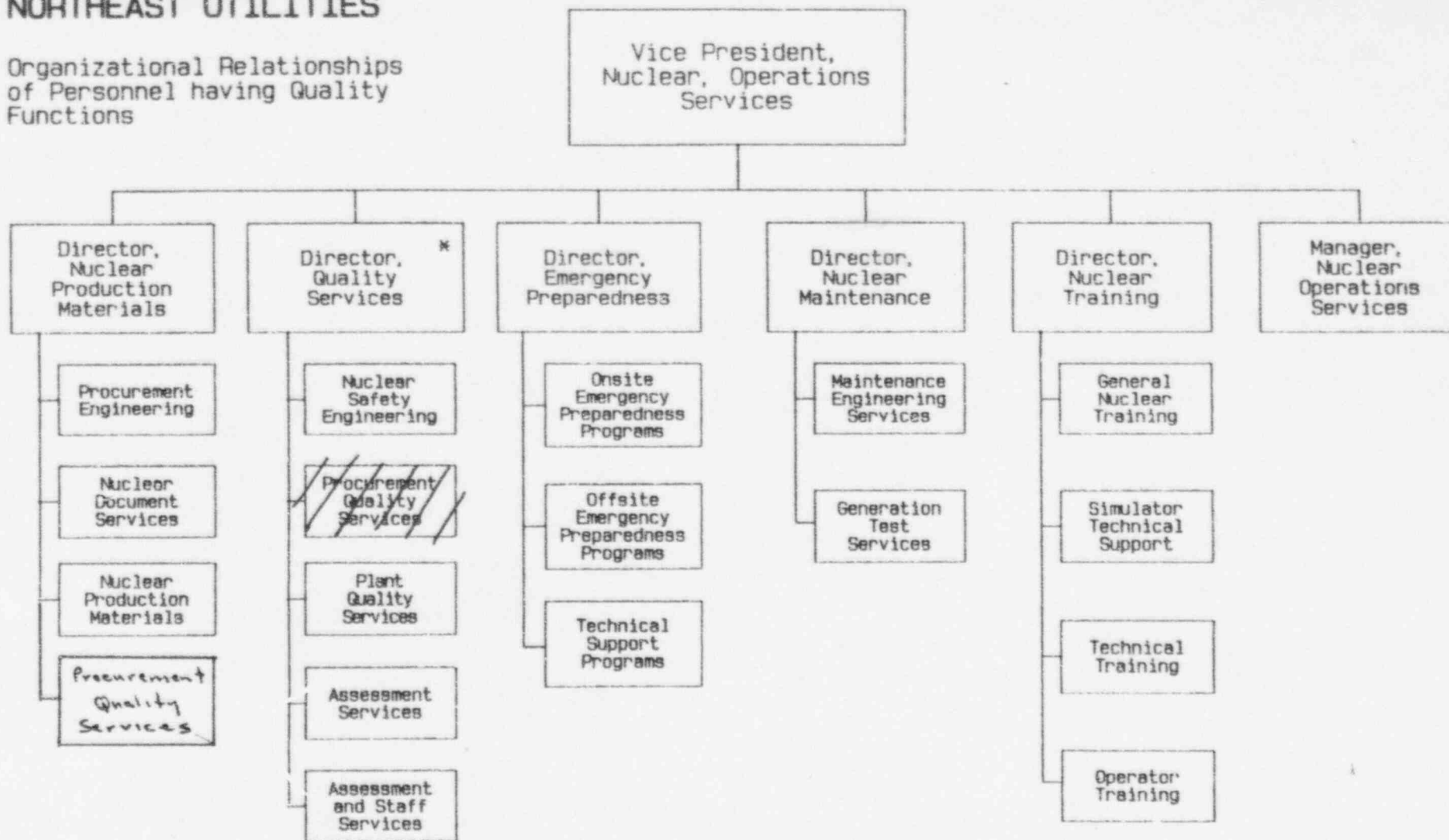
He has the authority and organizational freedom to verify all activities affecting quality. This is performed independent of undue influences and responsibilities for schedules and costs. He has the responsibility and authority, delineated in writing, to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming materials. He also has the responsibility and authority to identify quality problems, to recommend or provide solutions, and to verify their implementation.

The responsibilities and duties of all NUSCO Quality Services personnel are described in NUSCO/NUPOC implementing procedures.

1.4.2.3 The Director-Emergency Preparedness is responsible for the on-site Emergency Preparedness Program, the off-site Emergency Preparedness Program, and the Technical Support Programs.

NORTHEAST UTILITIES

Organizational Relationships
of Personnel having Quality
Functions



* Administrative Reporting Only

FIGURE 1.4

GAP 1.0
Rev: 16
Date: October 7, 1993

NORTHEAST UTILITIES

Organizational Relationships
Between NUSCO & NUPOC
Personnel having Quality
Functions

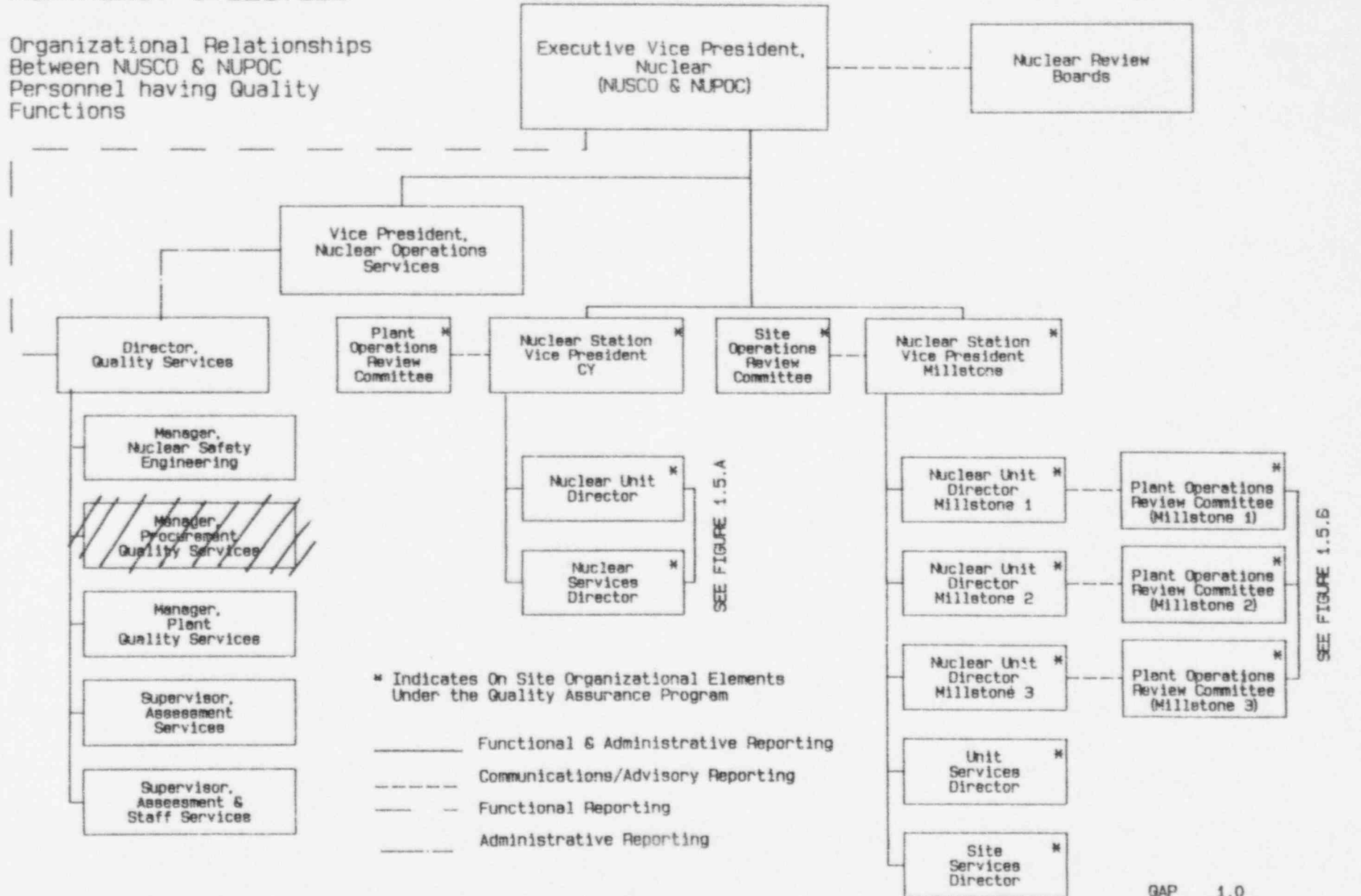


FIGURE 1.5

GAP 1.0
Rev: 16
Date: October 7, 1993

For systems, components, and structures, Regulatory Commitments and NUSCO/NUPOC procedures describe the measures taken to assure that the quality assurance requirements are met.

The degree of control over activities affecting quality systems, structures, and components is consistent with their importance to safety. Such controls include use of appropriate equipment, establishment of suitable environmental conditions, and assurance that all prerequisites for a given activity have been satisfied. This NUQAP Topical Report provides controls over special processes and skills necessary to attain the required quality, and the need for verification of quality by inspection and test.

Quality Services Department and applicable NUSCO/NUPOC technical organizations jointly determine and identify the extent quality assurance controls are to be applied to quality structures, systems, and components. The quality assurance controls are in conformance with this NUQAP Topical Report, which complies with the 18 criteria set forth in Appendix B, to 10 CFR Part 50.

2.2.4 PARTICIPATING ORGANIZATIONS

The NU organizations with responsibilities for activities affecting quality systems, structures, and components are identified in QAP 1.0, which also briefly describes their assigned responsibilities.

Quality Services Department is responsible for: a) the development, coordination, and control of the NUQAP including coordination of NUSCO Quality Services Department Procedure review and approval; b) control and issuance of the NUQAP Topical Report as a controlled document (as described in QAP 6.0) and; c) review and concurrence with quality assurance procedures and revisions written by other departments. Procedure reviews will be performed in accordance with QAP 5.0.

NU requires that their engineer-constructors, contractors, suppliers, engineering service organizations invoke upon their subcontractors, via procurement documents, requirements for a quality assurance program to meet the applicable criteria of Appendix B to 10 CFR, Part 50, including the applicable elements of the Regulatory Guides and their endorsed Standards identified in Appendix D of the Topical Report. However, NU retains overall responsibility for the QA Program. The specific quality activities performed by these organizations are specified in the procurement documents. ^{Procurement} Quality Services reviews and approves these organizations quality assurance programs

prior to initiation of contracted activities, and performs audits, surveillances, and inspections on subsequent activities for compliance to their procedures.

The object of the review is to verify that the engineering-constructors, contractors, suppliers, and engineering service organizations have an adequate quality assurance program to meet applicable requirements of Appendix B, to 10 CFR, Part 50.

In addition to the initial review, the engineer-constructor, contractors, suppliers, and engineering service organizations' quality assurance programs shall be periodically audited by Quality Services to assure continued implementation of quality requirements. ~~Quality Services~~ *Procurement*

Contractors may be delegated the execution of quality assurance functions by contract. These contracts are reviewed and approved in accordance with NUQAP requirements.

2.2.5 INDOCTRINATION AND TRAINING

A program is established and maintained for quality assurance indoctrination and training which provides confidence that the required level of personnel competence and skill is achieved and maintained in the performance of quality activities. Quality procedures delineate the requirements for an indoctrination program to assure that personnel responsible for performing quality activities are instructed in the purpose, scope, and implementation of quality procedures and instructions and that compliance to these documents is mandatory. The Director-Quality Services is responsible for the indoctrination of personnel within his department who perform quality activities.

Nuclear training programs shall be developed and implemented to provide training for all individuals attached to or associated with NU nuclear facilities. Additional guidance is established in NUSCO/NUPOC Procedures.

Implementing NUSCO/NUPOC Procedures describe the nuclear training program requirements which assure that:

- a. Documentation of formal training and qualification programs includes the objective, content of the program, attendees, and date of attendance;

The quality assurance programs of the engineer-constructor, NUSCO contractors, suppliers, and engineering service organizations that perform quality activities are reviewed by Quality Services to assure that their management regularly reviews the status and adequacy of their part of the NUQAP.

Procurement

which adversely affect quality systems, structures and components in design process are documented, and appropriate corrective action is taken. These design errors and deficiencies are documented in accordance with design change procedures or as defined in QAP 15.0.

3.2 IMPLEMENTATION

NUSCO *Project Services Department* is responsible for the design, design review, engineering approval of design changes, design evaluation and design control of nuclear power plants. The function may be delegated to other organizations to perform the design activity, or any part thereof, but the responsibility for overall design remains with *the PSD*. In all cases, final engineering decisions and ultimate design control of systems, structures and components related to nuclear power plants is the responsibility of *the PSD*.

NUSCO Quality Services performs audits, surveillances, and inspections, to verify that ~~the engineering constructors, contractors, suppliers, engineering service organizations and~~ NU departments are effectively complying with the NUQAP and procedural requirements for design control. *Procurement Quality Services performs audits, surveillances, and inspections, to verify that*

3.2.1 DESIGN PROCESS *the engineering constructors, contractors, suppliers, and engineering service organizations are*

Design control measures are applied to design analyses, such as, reactor physics, stress, thermal, hydraulic, nuclear radiation, accident and seismic analyses; compatibility of materials; accessibility for in-service inspection, maintenance, and repair; and delineation of acceptance criteria for inspections and test. Measures established to control design documents are described in QAP 6.0.

Program procedures and instructions define the method of implementing design control measures. These measures require that applicable design requirements, such as, design bases, regulatory requirements, codes and standards, are translated into specifications, drawings, procedures or instructions. Instructions further require that appropriate quality standards are specified and included in design documents. All materials, equipment, parts and processes, including standard "off the shelf" commercial or previously approved items essential to the quality functions, are selected and reviewed for suitability of application. The basis for selection may include industry standards, material and prototype hardware testing programs, and design review.

effectively complying with the NUQAP and procedural requirements for design control

QAP - 3.0

Rev.: 16

Date: October 7, 1993

Page 2 of 6

4.0 PROCUREMENT DOCUMENT CONTROL

4.1 GENERAL REQUIREMENTS

The procurement of materials, equipments, parts and/or services required during the design, construction, testing, operation and maintenance of quality systems, structures and components in nuclear power plants is performed in a controlled manner which assures compliance with applicable regulatory requirements, procedures, quality assurance standards and regulations affecting procurement documents. Changes to procurement documents are subject to the same degree of control as utilized in the preparation of the original documents.

4.2 IMPLEMENTATION

4.2.1 PROGRAM

A Project Engineer/Plant Engineer is selected for each modification to an in-service nuclear power plant. The project engineer coordinates the preparation, review and approval of procurement documents for quality material, equipment, parts or services, and ensures the technical adequacy and inclusion of quality assurance requirements.

NUSCO/NUPOC Purchase Requisitions are reviewed for technical adequacy and verification of the quality designation. The appropriate NUSCO Project Engineer/NUPOC Nuclear Unit Director reviews and approves NUSCO/NUPOC Purchase Requisitions, when applicable. ^{Procurement} Quality Services personnel then review the purchase requisition, for the inclusion and adequacy of quality assurance requirements, prior to the issuance of the purchase order.

Any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance, and modifications to nuclear power plants are responsible to implement measures for control of procurement documents associated with quality material, equipment, parts and services to ensure applicable requirements including quality assurance requirements are specified. Quality Services performs on-site ~~and off-site~~ audits, surveillances, and inspections, ^{as deemed appropriate} to ensure organizations utilized by NUSCO/NUPOC are effectively complying with their requirements for the control of procurement documents. ~~The~~ ^{Procurement} Quality Services performs off-site audits, surveillances, and inspections of these same organizations. Changes to procurement documents, whether initiated by NUSCO/NUPOC or their representative, are subjected to the same degree of control as that utilized in the preparation of the original document. The procurement of

spare or replacement parts for quality systems, structures, or components is subject to the controls of the latest NU QA Program and NUSCO/NUPOC procedure requirements. The spare or replacement parts are subject to controls equivalent to original or subsequent codes and standards. The use of subsequent codes and standards are controlled in accordance with the Design Change Control Requirements in QAP 3.0.

Procurement documents are reviewed by ^{Procurement}_A Quality Services personnel to determine that:

- a. The quality assurance requirements are correctly stated, auditable and controllable;
- b. There are adequate acceptance and rejection criteria.
- c. The procurement document has been prepared, reviewed, and approved in accordance with the NU QA program requirements.

4.2.2 PROCUREMENT DOCUMENT PROVISIONS

Procurement documents are prepared, reviewed and approved in accordance with approved procedures of the issuing organization or department and are available for verification. These procedures require that procurement documents consist of the following, as necessary:

- a. The scope of work to be performed;
- b. Technical requirements (specified or referenced) including the applicable components and materials identification requirements, drawings, specifications, procedures, instructions, codes and regulations, and the identification of applicable test, inspection and acceptance requirements, or special process instructions;
- c. Quality Assurance Program requirements to be imposed on contractors which include the applicable requirements of 10 CFR 50, Appendix B, and the NRC regulatory position contained in the Regulatory Guides and their endorsed ANSI Standards listed in Appendix D of this Topical Report;
- d. Right of access which provides, as appropriate, for access to contractor facilities and records for inspection or audit by NUSCO or its designated representative; and provides access for events such as those requiring notification of hold points;

- e. The documentation required to be prepared, maintained, and / or submitted to NUSCO/NUPOC or its representative for review, approval or historical record. The time of submittal of this documentation and the retention and disposition of quality assurance records which are not submitted to NUSCO/NUPOC is prescribed, as applicable, for NUSCO/NUPOC-Nuclear Grade procurements.

4.2.3 SELECTION OF PROCUREMENT SOURCES

If the engineer-constructor, contractor, or supplier is not delegated the function of procurement source selection, the NUSCO Purchasing Department verifies that the procurement document has been reviewed and approved, and that the supplier has been approved for procurement prior to issuing the purchase order for the material, equipment, parts and services.

Procurement documents may be issued to organizations with unapproved quality assurance programs. These procurement documents to unapproved organizations contain detailed supplementary quality assurance requirements and/or witness/hold point to meet NUSCO requirements.

Procurement documents are reviewed by ^{Procurement}Quality Services to ensure appropriate quality assurance requirements are specified. These requirements, included in the procurement document as necessary, include acceptance criteria, audits and/or inspections at the suppliers facilities with scheduled witness/hold points during the fabrication process and/or prior to shipment of the procured item. Acceptance inspections and tests determined by NU shall be performed after receipt at NU but prior to operation.

5.0 PROCEDURES, INSTRUCTIONS, AND DRAWINGS

5.1 GENERAL REQUIREMENTS

The NUQAP provides measures for the preparation, review, approval, control and distribution of procedures, instructions and drawings of activities affecting quality systems, structures and components during design, construction, testing, maintenance, modifications, and operation of nuclear power plants. The documents include appropriate quantitative and qualitative acceptance criteria which specify the activity to be performed, the methods of construction and testing to be employed, material, equipment or parts to be used, a sequence of operation and the required documentation.

5.2 IMPLEMENTATION

Quality Procedures provide direction for personnel performing quality functions. The Quality Services Department reviews and concurs with Quality Procedures such as those listed in Appendix C. Comments concerning compliance with the NUQAP Topical Report and regulatory requirements are resolved prior to issuance of the procedure. NUSCO Quality Services receives controlled copies of Quality Procedures that are listed in Appendix C. Any engineer-constructors, contractors, suppliers, and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modifications to nuclear power plants may be delegated responsibility for preparing, maintaining, issuing and verifying the implementation of appropriate program documents which are selectively reviewed/approved by the appropriate NUPOC Nuclear Unit Director, NUSCO Superintendent, Generation Construction, or Project Engineer, as appropriate. In this case, Quality Services performs on-site and off-site audits/surveillances/inspections of the quality assurance programs, ^{and Assessment, and Procurement Quality Services, respectively,} to ensure the engineer-constructor, contractor suppliers and engineering service organizations are effectively complying with their requirements for compliance with their requirements for procedures and instructions. Contractor programs are required to clearly delineate the actions to be accomplished in the preparation, review and control of procedures, instructions and drawings and the methods for complying with 10 CFR 50, Appendix B.

5.2.1 PROCEDURES AND INSTRUCTIONS

Procedures and instructions for activities affecting quality are prepared, reviewed, and approved in accordance with written procedures and instructions.

The NUSCO Superintendent, Generation Construction, or NUSCO/NUPOC Project/Plant Engineer, ensures that any engineer-constructors, contractors,

- g. Final Safety Analysis Report;
- h. Procurement Documents;
- i. Design Change Requests;
- j. Topical Report;
- k. Nonconformance Report;
- l. Computer Codes.

NUSCO/NUPOC Procedures describe the measures taken by Quality Services or individuals other than the person who generated the document but qualified in quality assurance, for the control of documents to assure review and concurrence, as necessary, for such documents listed above with regards to quality assurance aspects.

The requirements for control of procurement documents are contained in QAP 4.0. During all phases of plant life, it is the responsibility of each organization issuing controlled documents to employ document control procedures. The issuing organization is additionally responsible for distribution of the documents to appropriate locations. There shall be provisions to assure that approved changes are included in instructions, procedures, drawings and other documents prior to implementation of the changes.

Any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance, and modifications to nuclear power plants are responsible for implementing measures for review, approval, control and distribution of controlled documents, to ensure they are effectively complying with the requirements for document control. Quality Services ^{and Assessment} perform periodic on-site and off-site audits, surveillances, and inspections of the engineer-constructors, contractors, suppliers and engineering service organizations ^{respectively,} to verify compliance with their approved quality assurance programs.

Procurement Quality Services

6.2.2 DISTRIBUTION OF CONTROLLED DOCUMENTS

NUSCO/NUPOC Procedures, specify in what manner controlled documents and revisions thereof, are distributed to appropriate locations, prior to commencing the work. Holders of controlled copies of documents complete acknowledgement of receipt forms and return them to the distributor in order

to assure that obsolete or superseded documents are removed from the work areas in a timely manner. Quality ^{and Assessment} Services perform periodic on-site and off-site audits, surveillances, and inspections, ^{to verify compliance with the requirements of procedures for document control.}

respectively,

6.2.3 DRAWING CONTROL

The NU Nuclear Document Services Organization is responsible to implement a program, as per approved procedures, for the retention and retrieval of drawings and records submitted by the cognizant NUSCO/NUPOC project personnel. The NU Nuclear Document Services Organization maintains a drawing status file for in-service units which includes drawings newly issued or revised with latest revision and current status.

The engineer-constructor, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC during the design, construction and modification to nuclear power plants may be delegated the function of drawing control and must furnish periodic status reports listing the revisions of applicable drawings which they issue.

and Assessment

and Procurement Quality Services

The Quality ^{and Assessment} Services Department ^{and Procurement Quality Services} perform on-site and off-site audits, surveillances, and inspections of suppliers, ^{to verify they are effectively complying with their programs for document control of drawings.}

6.2.4 INSTRUCTION AND PROCEDURE CONTROL

and Assessment

and Procurement Quality Services

The Quality ^{and Assessment} Services Department ^{and Procurement Quality Services} performs audits, surveillances, and inspections of NU departments and any engineer-constructors, contractors, suppliers and engineering service organizations ^{utilized by NUSCO/NUPOC} in the design, construction, testing, operation, maintenance, and modification to ensure they are effectively complying with their QA program for control of procedures and instructions.

The originating department is responsible for establishing adequate control over quality procedures and instructions issued by them. The responsible organization also issues status reports or revised indices listing the latest revision of applicable controlled documents issued by them.

7.0 CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES

7.1 GENERAL REQUIREMENTS

Measures for the control of procured material, equipment, parts and services by or for NU related to the safety of nuclear power plants are established and imposed by the NUQAP during design, construction, testing, operation, maintenance and modification, to ensure conformance to procurement documents. These measures include provisions for source evaluation and selection, submission of objective evidence by the contractor or subcontractor, inspection at the supplier source and examination of items upon delivery. Control of quality by contractors and subcontractors is assessed for effectiveness at intervals consistent with the importance, complexity and quantity of the product or service.

7.2 IMPLEMENTATION

The word supplier is used in this section to designate what is otherwise described as the engineer-constructor, contractor, supplier or engineering service organization.

The evaluation and selection of suppliers is performed in accordance with procedures, which specify that procurement source evaluation and selection measures are performed to determine supplier capability and delineate responsibilities of qualified personnel involved in the evaluation and selection process.

Procurement

7.2.1 ^A Quality Services utilizes one or more of the following methods in evaluating the qualifications of a potential supplier:

- a. Audits and/or coordinated review of a potential supplier utilizing one or more departments (i.e., Engineering, Construction, Operations and/or Purchasing);
- b. Other utility supplier audits and evaluations;
- c. Nuclear Procurement Issues Committee (NUPIC) audits.
- d. ASME N, NA, NPT, NV, or MM/ MS Certificate of Authorization.
- e. Commercial grade surveys and/or coordinated review of a potential supplier utilizing one or more departments, (i.e., Engineering, Construction, Operations and/or Purchasing).
- f. *Source inspection/surveillance*

Evaluations ensure that NU suppliers employ a quality assurance program that conforms to applicable portions of the NUQAP Topical Report.

Procurement

Quality Services maintains documented evidence of the evaluation and acceptance of the supplier's quality assurance program. The determination of supplier approval is based on such factors as prior performance, quality performance data, audits, commercial grade surveys, surveillances and evaluations of the supplier's quality assurance program.

Suppliers' Certificates of Conformance are periodically evaluated by audits, commercial grade surveys, surveillances, independent inspections and tests, to assure they are valid. This verification of Certificates of Conformance is documented.

7.2.2 SOURCE INSPECTION

Procurement

Quality Services is responsible for the performance of source inspections at suppliers' facilities to ensure that the requirements of a Purchase Order Contract have been met.

Source inspections are performed in accordance with written procedures which provide for the method of inspection, the extent of documentation required and those responsible for implementing those instructions.

Inspection of items *occurs either when* verifications of procurement requirements cannot be determined upon receipt *or the supplier's QA program has not been accepted by* Quality Services.

Procurement

7.2.3 RECEIPT INSPECTION

Receipt inspection for procured items is performed ^{by Procurement} ~~under direction of the~~ NUSCO Quality Services ~~Department~~ in accordance with quality procedures which delineate requirements and responsibilities necessary to perform inspection functions. Contractual obligation fulfillment and *specified* requirements are verified during receipt inspections.

Receiving inspection of supplier-furnished material and equipment is performed to assure that material, components, equipment and acceptance records are *examined* in accordance with predetermined inspection instructions prior to *acceptance, installation and operation*. Receipt inspections include, as appropriate:

procurement

and/or engineering

The responsible Quality Services personnel shall review for acceptability those documents which pertain to the requirements in the procurement document, in accordance with the NUQAP Topical Report and its applicable procedures.

* New paragraphs

- 7.2.5 NUSCO/NUPOC Procedures address the measures taken to assure that for commercial grade items, where specific quality assurance controls for nuclear applications cannot be imposed in a practicable manner, that special dedication requirements are established and *implemented*.

These measures follow the guidance in Regulatory Guide 1.144, paragraph C.3.b (1) and Regulatory Guide 1.123 and applicable paragraphs of Section 10 of ANSI N45.2.13.

These measures include appropriate requirements for special categorization and identification within the procurement document, receiving inspection, and additional controls during the installation and testing process to be performed by the Quality Services ~~Department~~, NUPOC and/or other appropriate groups.

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* The Department that is contracting on-site QA services shall be responsible for the review and acceptability of vendor personnel/equipment certifications prior to the start of work.

The Quality and Assessment Services Department will provide oversight of these activities via audit, surveillance, or work observations.

implementation of the identification and control program to any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modification to nuclear power plants, as appropriate. If delegated, contracts require that the contractor establish an identification and control program which meets the NUQAP Topical Report requirement. In this case Quality Services performs on-site and off-site audits, surveillances, and inspections of the engineering-constructor, contractor, supplier, engineering service organization's quality assurance program to ensure they are effectively complying with these requirements for identification and control of material, equipment and components. ^{and Assessment} ^{and procurement} ^{Quality Services} ^{respectively}

Receipt inspections are performed to verify that materials, equipment and components are properly identified in accordance with procurement requirements. Quality Services is responsible for assigning and applying permanent identification to the items in accordance with approved procedures. If the application of a serial number is not practical, other means of identification are implemented to assure proper identification and traceability.

In the event that the equipment, material or component is nonconforming or the identification becomes lost or illegible, the items are considered nonconforming and are identified and controlled in accordance with QAP 15.0.

9.0 CONTROL OF SPECIAL PROCESSES

9.1 GENERAL REQUIREMENTS

The NUQAP provides measures to assure control of special processes associated with quality systems, structures and components by the use of qualified, approved procedures, equipment and personnel during design, construction, testing, operation, maintenance and modifications to nuclear power plants.

Special processes are performed under controlled conditions in accordance with special requirements and may include, but are not limited to: welding, cleaning, heat treating, and nondestructive examination and/or testing.

9.2 IMPLEMENTATION

During design, construction testing, operation, maintenance, and modification of nuclear power plants, the NUSCO/NUPOC Project/Plant Engineer is responsible for ensuring that special process data and documentation is reviewed, and that contractors, engineer-constructors, suppliers, and/or engineering service organizations special process procedures utilized at nuclear power plants are qualified and approved, and that personnel and equipment utilizing special processes are properly qualified prior to start of work. Quality ^{and Assessment} Services personnel ^{and Procurement} perform on-site and off-site audits, surveillances, and inspections, ^{respectively,} to ensure the engineering-constructors, contractors, suppliers, and engineering service organizations are effectively complying with their quality assurance program requirements for control of special processes.

NUSCO/NUPOC special process procedures utilized during testing, operation, maintenance, modification and refueling of the in-service nuclear power plant are prepared, reviewed and approved in accordance with procedures as specified in QAP 5.0.

9.2.1 PROCEDURE QUALIFICATION AND CONTROL

NUSCO / NUPOC Procedures specify that written process control documents are utilized and qualified, as required, in accordance the applicable specification, codes or standards.

9.2.2 PERSONNEL QUALIFICATION AND CERTIFICATION

Codes, standards and NUSCO/NUPOC procedures specify personnel qualification/certification requirements. Personnel responsible for the performance and verification of special processes are trained, tested, and

certified as required by applicable specifications, codes and standards. Requirements for the period of certification, retesting, and recertification of personnel are also specified. Contractors qualify personnel and maintain records of qualified personnel in accordance with applicable codes, standards, specifications, and contractor procurement document requirements. ^{The Department} ~~Quality~~ ~~Services Department~~ is responsible for the review of records of qualified personnel, equipment and procedures associated with special processes. ~~The Quality and Assessment Services Department will provide an oversight function via audit, surveillance, or work observation.~~ The Director, Quality Services is responsible for the training, testing, and certification of all NUSCO/NUPOC NDE personnel in accordance with the requirements of Regulatory Guide 1.58 (Rev. 1, 9/80) and ASNT Recommended Practice No. SNT-TC-1A.

9.2.3 SPECIAL PROCESS RECORDS

Records provide objective evidence that special processes were performed in accordance with approved procedures, by qualified personnel, and that when required by procedures, specifications, and codes, such performance was verified. Results of nondestructive examinations are recorded in accordance with applicable specifications, codes and standards. These records are retained by the supplier or supplied to NUSCO/NUPOC as required by contract or purchase orders. If records are to be retained by the supplier, the contract or purchase order specifies the retention period and instruction for final disposition of records.

Special process documentation such as special process procedures, qualifying data, and personnel and equipment qualification records associated with the performance of special processes at nuclear power plants, are kept current and maintained in appropriate NUSCO/NUPOC files, with final disposition to the appropriate NU *Nuclear Document Services* Facility.

10.0 INSPECTION

10.1 GENERAL REQUIREMENTS

Inspection of activities to verify the quality of systems, structures and components, which are performed by or for Northeast Utilities (NU), are executed in accordance with the Quality Assurance Program (NUQAP) and appropriate procedures, instructions and drawings by qualified personnel independent from the individual or group performing the activity being inspected. If inspection is impossible or disadvantageous, indirect controls by monitoring processing methods, equipment and personnel are provided. Inspection notification and hold points are identified, as required, in the applicable documents.

10.2 IMPLEMENTATION

10.2.1 INSPECTION RESPONSIBILITIES

During construction, testing, maintenance, modification, and operation, procedures shall define the need for inspections (e.g., receipt inspections, installation, system turnover, and product acceptance).

Quality Services personnel will ensure procedural requirements are met by means of audits and surveillances as defined in Quality Services procedures.

When inspections are required, Quality Services' involvement is as follows:

- a. Identification of inspection personnel;
- b. Review of work procedures and work documents;
- c. Preparation and approval of inspection plans ensuring that the necessary inspection requirements, methods, and acceptance criteria have been identified;
- d. Documentation of inspection results.

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Quality Services performs audits, surveillances, and inspections to verify that any engineer-constructors, contractors, suppliers, and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance, and modification to nuclear power plants are effectively complying with their quality

11.0 TEST CONTROL

11.1 GENERAL REQUIREMENTS

A documented test control program is established by the NUQAP for systems, structures and components to ensure that they will perform satisfactorily in service and that test results are documented in accordance with 10 CFR 50, Appendix B and other pertinent regulatory and/or technical requirements.

The test control program identifies the systems, structures and components to be tested, method of conducting tests, evaluation of tests and documentation of tests by qualified personnel to assure requirements have been satisfied.

The test control program is systematic and includes proof tests prior to installation, construction tests, operational tests, surveillance tests, and retest following repairs, replacements, preventative maintenance or modifications.

11.2 IMPLEMENTATION

11.2.1 TEST PROGRAM

Test requirements to determine or to verify the capability of an item to meet specified requirements in accordance with engineering/design documents, Safety Analysis Reports (SAR), technical specifications, procedures or procurement documents, as appropriate, are accomplished by subjecting the item to a set of physical, chemical, environmental or operating conditions. Retest following repair, replacement or modification is performed in accordance with the original design requirements or acceptable alternatives and is performed when original test results are invalidated.

NUSCO/NUPOC procedures are written and approved to delineate the methods and responsibilities for controlling, accomplishing and documenting testing during construction, maintenance, operation and modification of nuclear power plants.

Any engineer-constructors, contractors, suppliers, and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modification to nuclear power plants are responsible for implementing measures for the control of tests to ensure that materials, equipments and parts will perform satisfactorily. Quality Services^{and Assessment} perform on-site and off-site audits, surveillances, and inspections of selected proof tests when hold

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points have been identified in Purchase Order/Contracts of the engineer-constructors, contractors, suppliers and engineering service organizations to verify they are complying with their quality assurance program requirements for test control. Documentation associated with these observations are maintained by Quality Services/*Procurement Quality Services*.

Proof tests, product acceptance tests, retests, and periodic surveillance tests are conducted by qualified personnel in accordance with approved procedures. Personnel performing tests ensure that calibrated equipment and instrumentation utilized are within the calibration interval specified. Documentation including test procedures and approved data sheets are maintained in appropriate files.

11.2.2

TEST PROCEDURE PREPARATION AND TEST PERFORMANCE

Testing is accomplished in accordance with approved test procedures which incorporate or reference the requirements and acceptance criteria in the applicable design and procurement documents. The test procedure or test program documents include the following as a minimum:

- a. Instructions for the testing method used;
- b. Required test equipment and instrumentation;
- c. Test requirements, such as acceptance and rejection criteria;
- d. Hold, notification, inspection and data collection points;
- e. Test prerequisites such as: calibrated instrumentation; trained, qualified, and licensed or certified personnel; preparation, condition and completeness of item to be tested; suitable and controlled environmental conditions;
- f. Methods for documenting or recording test data and results;
- g. Provisions for data collection and storage.

11.2.3

TEST EQUIPMENT

NUSCO/NUPOC Procedures provide the criteria for determining when a test is required and the accuracy requirements of test equipment.

During the operations phase of a nuclear plant, the following steps are taken:

- a. To ensure accuracy, test instrumentation is checked and calibrated in accordance with NUSCO/NUPOC procedures.
- b. Plant instrumentation used in testing is calibrated. It is maintained in calibration at regular intervals in accordance with established surveillance and / or preventative maintenance procedures.
- c. Where special instrumentation is required for testing, the requirements are stated in the procedures. Instrument characteristics, including accuracy requirements, are equivalent to or better than those specified by the vendor.

11.2.4

EVALUATION OF TEST RESULTS

The documented test results are evaluated against the predetermined acceptance criteria by an individual or group having appropriate qualifications. The acceptance status of the test is documented. Deficiencies noted during the evaluation are documented and dispositioned in accordance with approved procedures.

The evaluation of test results may also be delegated to other organizations. The evaluating organization is required to assure the use of qualified personnel, evaluate the data against predetermined criteria and document the results of the evaluation and acceptance status of the test. Quality Services/~~Procurement~~ Quality Services performs audits, surveillances, and inspections to verify that these organizations are effectively complying with their quality assurance program requirements for test control.

12.0 CONTROL OF MEASURING AND TESTING EQUIPMENT

12.1 GENERAL REQUIREMENTS

The NUQAP provides measures for the control of measuring and testing equipment (M&TE) used as the basis for acceptance in activities affecting quality during inspection, testing and measurement of materials, equipments and parts. Periodic calibration and adjustment of measuring and test equipment is performed and controlled to assure accuracy is maintained within limits necessary to verify that design and operating condition requirements have been met. Documentation is retained such that all items of M&TE are traceable to their calibration records.

12.2 IMPLEMENTATION

12.2.1 Approved procedures delineate the methods and responsibilities for the control, maintenance and calibration of M&TE including portable and installed instruments, tools, gages, fixtures, reference and transfer standards, and nondestructive test equipment.

All documentation associated with M&TE is maintained in appropriate files, with eventual incorporation into the NU Nuclear Records Program.

During NUSCO-directed activities on a nuclear plant, with the exception of Generation Construction's directed activities, the calibration program is implemented in accordance with the requirements defined in NUSCO Procedures. NUSCO functional groups are responsible for implementing these procedures which comply with the requirements contained in specifications and drawings. ~~The~~ ^{Procurement} Quality Services ~~Department~~ is responsible for verifying that receipt of calibrated equipment is in conformance with the requirements of procurement documents, and to control calibrated M&TE used during their inspections.

During NUPOC/Generation Construction/Generation Test-directed activities, the calibration program is implemented in accordance with the requirements defined in NUPOC Procedures. The Site / Plant Operations Review Committee (SORC/PORC) reviews and approves procedures related to the calibration program. Department heads/Job Supervisors are responsible to ensure that

M&TE equipment is calibrated, issued, and controlled in accordance with the requirements of the procedures. During Generation Construction-directed activities, the Job Supervisor shall ensure that the users of the M&TE are properly instructed in the use and control of the M&TE. Department Heads are responsible for calibrating M&TE within the required frequency and for reviewing calibration data associated with M&TE calibration by outside vendors in accordance with the procedures.

Quality Services performs audits, surveillances, and inspections and to verify implementation of the calibration program.

Any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modification to nuclear power plants are responsible for implementing measures for the control of M&TE to ensure they are properly calibrated, adjusted and maintained at specified intervals in order to maintain accuracy within required limits. NUSCO Quality ^{and Assessment} Services ~~perform~~ ^{and} on-site and off-site audits, surveillances, and inspections of the quality assurance programs of the engineer-constructors, ^{respectively,} contractors, suppliers and engineering service organizations to verify they are effectively complying with their requirements for control of M&TE. ^{and Procurement Quality Services}

12.2.2

CALIBRATION STANDARDS

Measuring and test equipment is calibrated at specified intervals based on the required accuracy, purpose, degree of usage, stability characteristics, and other conditions affecting the measurement. Measuring and test equipment shall be labeled or tagged to indicate the date calibrated and next calibration date.

NUSCO/NUPOC Procedures describe the measures taken to assure that reference and transfer standards are traceable to nationally recognized standards and that, where national standards do not exist, provisions are established to document the basis for calibration.

13.0 HANDLING, STORAGE AND SHIPPING

13.1 GENERAL REQUIREMENTS

Measures are established by the NUQAP using approved procedures, instructions and procurement documents to ensure proper handling, storage, shipping, cleaning and preservation of material, equipment and parts. These measures are imposed during the design, procurement, construction, testing and operation of nuclear power plants and modifications thereto, in order to preclude damage, loss or deterioration of materials, equipments and parts.

13.2 IMPLEMENTATION

13.2.1 GENERAL

Procedures, instructions and procurement documents define the requirements and responsibilities for the handling, storage, shipment, cleaning and preservation of material, equipment, and parts required for implementation of established design and specification requirements.

Handling, storage, cleaning and preservation requirements of material, equipment and parts is conducted in accordance with written procedures and procurement documents. Any engineer-constructors, suppliers, and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modifications to nuclear power plants are responsible for implementing measures for handling, storage, shipping, cleaning and preserving materials equipment and parts to preclude damage, loss or deterioration. ^{and Assessment/Procurement Quality Services} Quality Services performs audits, surveillances, and inspections to verify that NUSCO/NUPOC, contractors, suppliers and engineering service organizations are effectively implementing and complying with the approved procedures and instructions for handling, storage, shipping, cleaning and preservation of materials, equipments and parts.

13.2.2 ESTABLISHMENT OF SPECIAL HANDLING, STORAGE, SHIPPING, CLEANING AND PRESERVATION REQUIREMENTS

Special or additional handling, storage, shipping, cleaning and preservation requirements are to be identified and implemented as specified in procurement documents and approved procedures. These established requirements are consistent with the regulatory positions

14.0 INSPECTION, TEST AND OPERATING STATUS

14.1 GENERAL REQUIREMENTS

The NUQAP provides measures for indication, by the use of marking such as stamps, tags, labels or other suitable means, the status of tests and inspections of material, equipment and parts throughout design, construction, testing, operation, maintenance and modification of nuclear power plants, to preclude the inadvertent bypassing of inspection and test requirements. These measures provide for the identification of items which have satisfactorily passed required inspections and tests. Measures are also established for indicating the operating status of systems, structures and components to prevent inadvertent operation.

14.2 IMPLEMENTATION

14.2.1 GENERAL

Any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modification to nuclear power plants are responsible for implementing approved measures for the identification of inspection and test status of material, equipment and parts to preclude the bypassing of requirements. ^{and Assessment} Quality Services, ^{and Procurement} perform on-site and off-site audits, surveillances, and inspections of the engineer-constructors, contractors, suppliers and engineering service organizations, ^{respectively} as appropriate, to verify that they are effectively complying with their requirements for identification of inspection and test status, in compliance with approved procedures and instructions. Elements of this system require that suppliers and contractors have a controlled manufacturing and test operation, in order to preclude the inadvertent bypassing of process inspections or tests, and to provide a positive identification of component status throughout all phases of manufacturing, testing, and inspection by means of tagging, routing cards, stamping, manufacturing or test reports, labeling or other appropriate methods.

When Receipt Inspections are performed at the NU Nuclear Generating Facilities, ^{Procurement} Quality Services ensures that traceability is maintained for acceptable materials, equipments and parts, to indicate conformance to Purchase Order/Contract requirements. Nonconforming materials, equipment and parts are identified in accordance with QAP 15.0.

15.0 NONCONFORMING MATERIALS, PARTS, COMPONENTS, OR SERVICES

15.1 GENERAL REQUIREMENTS

The NUQAP requires that documentation and control of nonconforming materials, parts, components, or services utilized in systems, structures and components during design, construction, testing, operation and maintenance of nuclear power plants and modifications thereto, be performed in accordance with approved procedures in order to prevent inadvertent use or installation. These procedures include appropriate requirements for identification, documentation, segregation and disposition of nonconforming items, and notification to affected organizations.

15.2 IMPLEMENTATION

15.2.1 PROGRAM

Approved procedures define personnel responsibilities and establish various measures for identification, documentation, segregation, review and disposition of nonconforming item reports. Report mechanisms are available to all NU personnel and utilized based on the scope of their departmental responsibilities and procedural guidance.

15.2.2 DOCUMENTATION

Documentation of nonconforming items requires identification of the items, description of the nonconformance, disposition of the nonconformance, inspection requirements and signature approval of the disposition. A trend analysis of nonconformances documenting program/procedural problems is performed by NU in accordance with approved procedures. The trend analysis results are periodically reported to upper management, including the Executive Vice President, Nuclear and Director, Quality Services Department, for review and assessment.

Tagging systems are utilized to physically identify nonconforming items prior to installation. ~~The~~ ^{Personnel} Quality Services ~~Department~~ utilizes tags for received material, parts and components.

An engineering evaluation is performed, if necessary, prior to the resolution of nonconformances.

15.2.3 EVALUATION AND DISPOSITION

17.0 QUALITY ASSURANCE RECORDS

17.1 GENERAL REQUIREMENTS

The NUQAP provides for the maintenance, identification, retention and retrieval of records to furnish evidence of activities affecting quality during design, construction, testing, operations, maintenance and modification of nuclear power plants. The records include but are not limited to: operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance and material analyses. The records also include closely related data such as qualifications of personnel, procedures and equipments. Inspection and test records contain as a minimum but are not limited to: identification of inspector or data recorder and the acceptability and the action taken in connection with any deficiencies and Reportable Occurrences noted. Approved procedures establish requirements concerning record retention such as duration, location and assigned responsibility.

17.2 IMPLEMENTATION

NUSCO/NUPOC Procedures and Instructions establish the responsibilities and requirements for the maintenance, identification, retention and retrievability of records pertaining to materials, equipments, parts, processes or operations relating to systems, structures and components which when founded on observations, measurements or tests can be fully verified, and documented by cognizant personnel.

Any engineer-constructors, contractors, suppliers and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance and modification to nuclear power plants are responsible to implement measures for identification, maintenance, retention, retrieval and turnover to the NUSCO/NUPOC personnel of documented and approved records which contain objective evidence of quality, as specified in Purchase Order/Contracts. Quality Services/^{and Assessment} ~~performance~~ ^{Improvement} on-site and off-site audits, surveillances, and inspections, ^{Quality Services} respectively, of the engineer-constructors, contractors, suppliers and engineering service organizations, as appropriate, to verify they are effectively complying with their program for quality assurance records.

NUSCO/NUPOC records are identified, controlled and maintained in appropriate files and are identifiable to specific systems, structures and components within the nuclear power plant. When identification to a specific system, structure or component is not practical, records are filed by category (e.g. specification, nonconformance reports, audits, etc).

17.3 RETENTION

18.0 AUDITS

18.1 GENERAL REQUIREMENTS

The NUQAP requires that a comprehensive system of planned and periodic audits shall be carried out to verify compliance with the NUQAP Topical Report during the design, construction, modification, testing, maintenance, and operation of nuclear power plants.

Audits are conducted in accordance with written procedures and checklists by appropriately trained personnel not having direct responsibilities in the areas being audited.

Audit results are documented and reviewed by management having responsibility in the area audited and the responsible management takes the necessary action to address any audit findings revealed by the audit.

18.2 IMPLEMENTATION

18.2.1 PROGRAM

The Audit program requires audits of corporate and plant quality activities. Audits are performed on activities where the requirements of 10 CFR 50 and respective Technical Specifications are being implemented. In addition to those activities, audits are performed on areas associated with indoctrination and training programs, ~~and~~ interface control among the licensee and contractors. Audits are regularly scheduled on the basis of the status and safety importance of the activities being performed. Regularly scheduled audits are supplemented by audits for one or more of the following conditions:

- a. When significant changes are made in functional areas of the quality assurance program, such as significant reorganization or procedure revisions.
- b. When it is suspected that the quality of the item is in jeopardy due to deficiencies in the quality assurance program.
- c. When a systematic, independent assessment of program effectiveness is considered necessary.
- d. When necessary to verify implementation of required corrective action.

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Schedules are originated and maintained by the Quality Services Department.

Audits are performed as specified in procedures by qualified personnel, using a preestablished written audit plan prepared by the auditing organization. Auditors evaluate the work areas, activities, processes, items, and review documents and records to determine the effectiveness of implementation and conformance to the NUQAP.

Approved contractors, suppliers, and engineering service organizations utilized by NUSCO/NUPOC in the design, construction, testing, operation, maintenance, and modification to nuclear power plants are responsible for developing and implementing a system of planned and periodic audits to verify compliance with the effectiveness of all aspects of their quality assurance programs. ^{and Assessment} Quality Services personnel perform audits to ensure these organizations are effectively complying with their quality assurance requirements. ^{Procurement} Quality Services

In addition to the audits, other methods, such as surveillances, and inspections are used to ensure that quality activities are in compliance with the NUQAP Topical Report.

18.2.2

REPORTING OF AUDIT RESULTS

Audit results are reviewed and approved by the Quality Services Department in accordance with approved procedures. The audit reports are issued to the appropriate management of the area audited to ensure *appropriate and/or timely* corrective action is taken to address any audit findings. In addition, audit data and reports are accumulated as part of the review for quality trends and *assessed to ensure* the effectiveness of the quality assurance program.

18.2.3

REVIEW OF AUDIT FINDINGS

Audit results are documented, reviewed, and analyzed with management having responsibility in the area audited. The responsible management is required to take the necessary action to address any findings identified by the audit.

18.2.4

RESOLUTION OF AUDIT FINDINGS

Appropriate action to resolve findings identified during audits is to be taken by the cognizant NUSCO/NUPOC organization before scheduled resolution dates. *The audited organization reviews the findings, and*

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PRQS-3.01 Procurement Document
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PRQS-3.04 Performance of
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VII. Control of Purchased
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PRQS-3.02 Supplier Evaluations

PRQS-3.03 Evaluation and
Approval of Nuclear
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PRQS-3.05 Control of the
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List, and Commercial
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PRQS-3.10 Periodic Oversight
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X. Inspection

PRQS-3.07 Preparation,
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	PRQS-2.12 Performing, Reporting, and Follow-up of Procurement Quality Services Audits