

## 4.0 PROCUREMENT DOCUMENT CONTROL

### 4.1 GENERAL REQUIREMENTS

This QAP provides measures to control the procurement of materials, equipment, parts and services for quality structures, systems, and components for the Millstone Power Station nuclear units and ISFSI to assure 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 responsible engineer is selected for each modification to a Station nuclear power plant or ISFSI. The responsible engineer coordinates the preparation, review and approval of procurement documents for quality materials, equipment, parts and services, and assures the technical adequacy and inclusion of quality assurance requirements.

Requests for materials, equipment, parts and services are reviewed for technical adequacy and verification of the quality designation. The appropriate responsible engineer/nuclear unit management reviews and approves such requests in accordance with applicable procedures. Supply Chain Management (SCM) personnel then perform a procurement engineering evaluation to assure the inclusion and adequacy of quality assurance requirements prior to the issuance of the purchase order. Materials, equipment, and parts for which technical and quality assurance requirements have been previously established within the enterprise-wide Supply Chain Management system are purchased without additional procurement engineering evaluations.

Vendors utilized to perform quality activities for the Station nuclear power plants or the ISFSI are responsible to implement measures for control of associated procurement documents to assure applicable requirements including quality assurance requirements are specified.

Audits, surveillances, and inspections are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for the control of procurement documents.

Changes to procurement documents, whether initiated by the company or its 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 structures, systems, or components is subject to the controls of this QAP and applicable 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 QAP 3.0, "Design Control".

Procurement engineering evaluations of requests for quality materials, equipment, parts, and services requests are performed by Supply Chain Management (SCM) personnel to assure that:

- a. Adequate technical requirements are specified;
- b. The quality assurance requirements are correctly stated, auditable and controllable;
- c. There are adequate acceptance and rejection criteria.

#### 4.2.2 PROCUREMENT DOCUMENT PROVISIONS

Procurement documents are prepared, reviewed and approved in accordance with applicable 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 vendors which include the applicable requirements of 10 CFR 50, Appendix B, 10 CFR 72, and the NRC regulatory position contained in the regulatory guides and their endorsed ANSI/IEEE standards listed in Appendix C.
- d. Right of access which provides, as appropriate, for access to vendor facilities and records for inspection or audit by the company 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 the company 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 the company is prescribed, as applicable, for nuclear grade procurements.

#### 4.2.3 SELECTION OF PROCUREMENT SOURCES

The vendor is specified during the procurement process based upon the vendor approval status, qualifications and capabilities to provide the product or service, performance history, and the company's ability to verify the quality of the product or service being purchased. The company maintains an approved vendors list based upon the technical and quality capability as determined by a direct evaluation of the vendor's facilities and personnel and the implementation of the vendor's quality assurance program.

Procurement documents may be issued to vendors with unapproved quality assurance programs. These procurement documents to unapproved vendor contain detailed supplementary quality assurance requirements and/or witness/hold points to meet the company's requirements.

Procurement documents are reviewed by Supply Chain Management (SCM) to assure appropriate quality assurance requirements are specified. The requirements include, as necessary, audits, surveillances, or inspections at the vendor's facilities with scheduled witness/hold points during the fabrication process and/or prior to shipment of the procured items. Acceptance inspections and tests determined by the company shall be performed after receipt at Millstone Power Station but prior to installation in the plant or ISFSI or prior to the point when the installation is declared operational.

## 5.0 PROCEDURES, INSTRUCTIONS, AND DRAWINGS

### 5.1 GENERAL REQUIREMENTS

This QAP provides measures for the preparation, review, approval, control and distribution of procedures, instructions and drawings for activities affecting quality structures, systems, and components of the Millstone Power Station nuclear units and ISFSI. The documents include appropriate quantitative and qualitative acceptance criteria which specify the activity to be performed, the methods of fabrication, construction, and testing to be employed; the materials, 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 activities. Nuclear Oversight reviews other quality procedures which implement this QAP as described in Section 5.2.1 below. Comments concerning compliance with this QAP and regulatory requirements are identified and resolved. Any vendors utilized to perform quality activities for the Station nuclear power plant or ISFSI may be delegated responsibility for preparing, maintaining, issuing and verifying the implementation of appropriate program documents which are selectively reviewed/approved by the appropriate Director or Responsible Engineer. Audits, surveillances, and inspections are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for compliance with procedures and instructions. Vendor quality assurance 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 and/or 10 CFR 72, Subpart G, for the ISFSI.

#### 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 cognizant Director or responsible engineer assures that any vendors utilized to perform quality activities for the Station nuclear power plant or ISFSI implement quality assurance programs which contain written instructions for preparation, review and approval of procedures and instructions affecting quality. In addition, vendor procedures which affect quality that are to be used for onsite activities are reviewed for concurrence by Nuclear Oversight to assure compliance with this QAP Topical Report.

The company is responsible for the preparation, review and approval of station and plant quality procedures. The procedures include test procedures and overall site administrative procedures which implement the requirements of this QAP. Each company organization is also

responsible for the preparation, review and approval of procedures covering quality activities in accordance with individual license requirements. Nuclear Oversight reviews quality procedures and special process procedures through its audit program. The criteria for documents requiring Nuclear Oversight review is defined in quality procedures to assure:

- a. Administrative procedures and manuals comply with this QAP and applicable Appendix C regulatory guides and endorsed ANSI/IEEE standards.
- b. Work procedures and work documents used to perform quality activities have the necessary quality assurance controls as described in QAP 10.0, "Inspection". The Nuclear Oversight Quality Control group must concur with quality related procedures related to maintenance, modification and inspection.

#### 5.2.2 DRAWINGS

The design control and verification measures described in QAP 3.0, "Design Control", are applicable for the review and approval of drawings. Review and approval of new drawings or modifications to existing drawings are described in company procedures. The originating organization may delegate to other organizations or departments the work of design and review activities, or any part thereof, but retains responsibility for this work.

The measures taken to assure the preparation of as-built drawings and related documentation in a timely manner to accurately reflect the actual plant or ISFSI are described in company procedures. Drawings critical to operation are updated prior to system turnover to operation and are available to the operating personnel.

#### 5.2.3 ACCEPTANCE CRITERIA

Cognizant department heads review and approve departmental procedures, instructions and drawings to assure the inclusion of adequate quantitative and qualitative acceptance criteria, as appropriate, for determining satisfactory work performance and quality compliance for applicable quality activities.

## 6.0 DOCUMENT CONTROL

### 6.1 GENERAL REQUIREMENTS

This QAP provides measures to assure controlled distribution of documents pertinent to quality activities performed for the Millstone Power Station nuclear units and ISFSI in accordance with quality procedures.

Documents such as procedures, instructions, drawings, specifications and reports are prepared, reviewed for appropriate qualitative and quantitative acceptance criteria, and approved by authorized personnel in the affected organization. Approved controlled documents are distributed to affected locations in accordance with controlled distribution lists. Changes to controlled documents are reviewed and approved by the same organization which performed the original review and approval, unless otherwise specified in the applicable procedures. Measures are provided for controlling documents to preclude the possibility of use of outdated documents.

### 6.2 IMPLEMENTATION

#### 6.2.1 RESPONSIBILITY

The company procedures and instructions delineate the measures for controlling documents including direction for the review for adequacy, approval by authorized personnel, distribution of controlled documents and verification that changes are promptly incorporated and implemented. These control measures apply to documents affecting quality structures, systems and components during the performance of quality activities for the Station nuclear power plants/ISFSI and include documents such as:

- a. Design Specifications;
- b. Design, Manufacturing, Construction and Installation Drawings;
- c. As-Built Documents;
- d. Quality Assurance Program Manuals, Procedures and Instructions;
- e. Manufacturing, Inspection and Testing Instructions;
- f. Test Procedures;
- g. Calculations;
- h. Engineering Record Correspondence;
- i. Design Basis Documentation Summaries (DBDS)

- j. Final Safety Analysis Reports;
- k. Procurement Documents;
- l. Design Change Records;
- m. Topical Report;
- n. Nonconformance Reports;
- o. Computer Codes.

The company procedures describe the measures taken by Nuclear Oversight 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, "Procurement Document Control". 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 vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible for implementing measures for review, approval, control and distribution of controlled documents to assure they are effectively complying with the requirements for document control. Audits, surveillances, and inspections are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for document control.

#### 6.2.2 DISTRIBUTION OF CONTROLLED DOCUMENTS

The company procedures specify in what manner controlled documents, and revisions thereof, are distributed to appropriate locations prior to commencing the work.

#### 6.2.3 DRAWING CONTROL

Nuclear Procedures and Document Administration is responsible to implement a program, through applicable procedures, for the retention and retrieval of drawings and records submitted by cognizant company personnel. Nuclear Procedures and Document Administration maintains a drawing status file which includes drawings newly issued or revised with the latest revision and current status.

Vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI may be delegated the function of drawing control and must furnish periodic status reports listing the revisions of applicable drawings which they issue.

Audits, surveillances, and inspections are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for control of drawings.

#### 6.2.4 PROCEDURE AND INSTRUCTION CONTROL

Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, to verify that company processes are effectively complying with this QAP and procedural requirements, for control of procedures and instructions. Audits, surveillances, and inspections are performed, as appropriate, to verify vendors utilized to perform quality activities are effectively complying with their quality assurance program requirements 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

This QAP provides measures for the control of purchased material, equipment, parts and services utilized in quality activities for the Millstone Power Station nuclear units and ISFSI to assure conformance to procurement documents. These measures include provisions for source evaluation and selection, submission of objective evidence by the vendor or subvendors, inspection at the vendor facility, and acceptance inspection and testing of the product upon delivery. Control of quality by vendors and their subvendors is assessed for effectiveness at intervals consistent with the importance, complexity and quantity of the product or service.

### 7.2 IMPLEMENTATION

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

#### 7.2.1 VENDOR QUALIFICATIONS

Supply Chain Management (SCM) utilizes one or more of the following methods in evaluating the qualifications of a potential vendor:

- a. Audits performed by Nuclear Oversight and/or Supply Chain Management (SCM) coordinated review of potential vendor utilizing one or more departments (i.e., Nuclear Engineering, Nuclear Site Services, Nuclear Maintenance, Nuclear Operations);
- b. Other utility vendor audits and evaluations;
- c. Nuclear Procurement Issues Committee (NUPIC) audits;
- d. ASME N, NA, NPT, NV, or MM/ MS Certificate of Authorization;
- e. ASME Certificate of Accreditation for Authorized Inspection Agencies;
- f. Commercial grade surveys and/or coordinated review of a potential vendor utilizing one or more departments, (i.e., Nuclear Engineering, Nuclear Site Services, Nuclear Operations, Supply Chain Management);
- g. Source inspection/surveillance.

Evaluations assure that vendors providing quality material, equipment, parts and services employ a quality assurance program that conforms to applicable portions of this QAP.

Supply Chain Management (SCM) is responsible for assuring that documented evidence of the evaluation and acceptance of the vendor's

quality assurance program is maintained. The determination of vendor approval is based on such factors as prior performance, quality performance data, audits, commercial grade surveys, surveillances and evaluations of the vendor's quality assurance program.

Vendor 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

Supply Chain Management (SCM) is responsible for the performance of source inspections at vendor facilities to assure that the requirements of a purchase order/contract have been met.

Source inspections are performed in accordance with 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 vendor quality assurance program has not been accepted by Supply Chain Management (SCM).

### 7.2.3 RECEIPT INSPECTION

Receipt inspection for procured items is performed by Supply Chain Management (SCM) in accordance with quality procedures which delineate requirements and responsibilities necessary to perform inspection functions. The exception to this is Nuclear Fuel Engineering performing receipt inspection for new fuel assemblies in accordance with quality procedures. Contractual obligation fulfillment and specified requirements are verified during receipt inspections.

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

- a. Measures for verifying that the shipment is complete, properly identified, undamaged and corresponds with the required documentation;
- b. Measures for inspection of the item's critical characteristics and review of supporting documentation (e.g., mill test reports, NDE reports) as required by the procurement documents;
- c. Measures for inspection and acceptance of items in accordance with predetermined methods;

- d. Measures for identifying and controlling acceptable items including identification of inspection status prior to release from the receiving inspection area;
- e. Measures for identifying, segregating and handling nonconforming items;
- f. Measures to ascertain that inspection records or Certificates of Conformance are acceptable prior to release for installation;
- g. In cases involving purchased services, the responsible engineer or department head shall designate the means by which services may be accepted, and is given the authority to accept services in accordance with methods defined in company procedures.

#### 7.2.4 VENDOR FURNISHED RECORDS

Records required to be furnished by the vendor are specified in the procurement documents. Certifications or documentation provided by the vendor which attests to conformance, identifies that all the specific procurement requirements have been met (either by reference to the purchase order or by delineation).

The vendor must furnish the following records as a minimum for nuclear grade purchases:

- a. Documentation that identifies the purchased material, equipment, or parts and the specific procurement requirements (e.g., codes, standards and specifications) which have been met by the items;
- b. Documentation that identifies any procurement requirements which have not been met, together with a description of those Nonconformances dispositioned "accept as is" or "repair."

The responsible Supply Chain Management (SCM) and/or Nuclear Fuel Engineering and other appropriate department personnel shall review for acceptability those documents which pertain to the requirements in the procurement document, in accordance with this QAP and applicable procedures.

The department that is contracting onsite quality assurance services shall be responsible for the review and acceptability of vendor personnel/equipment certifications prior to the start of work. Nuclear Oversight shall provide oversight of these activities via surveillance, or inspection, as appropriate, to verify compliance with this requirement.

### 7.2.5 COMMERCIAL DEDICATION

The company 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 Supply Chain Management (SCM), other company processes, or other appropriate groups.

## 8.0 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS AND COMPONENTS

### 8.1 GENERAL REQUIREMENTS

This QAP provides measures for the identification and control of materials, parts and components, including partially fabricated assemblies utilized in quality activities for the Millstone Power Station. To assure that each item can be traced to associated documentation, the identification of the item is maintained by heat number, lot number, part number, serial number, or other appropriate methods, and is physically marked on the item and/or on records traceable to the item. Documentation associated with materials, parts, and components delineate that these items have been designed, fabricated, manufactured, tested and/or inspected in accordance with the specified requirements. The object of these controls is to prevent the use of incorrect or defective materials, parts and components.

These measures also require the company assure that the identification of inspections, tests, and operation status of structures, systems, and components is known to affected organizations.

### 8.2 IMPLEMENTATION

Company procedures establish the responsibilities and requirements for the identification and control of materials, parts and components. The procedures assure that identification and control are maintained throughout fabrication, receipt, handling, storage and installation of items. Provisions include:

- a. Requirements for traceability to appropriate documentation such as: purchase orders, contracts, manufacturing documents, drawings, specifications, certifications, inspection and test records, and nonconformance reports;
- b. Controls to assure that the correct identification of an item is verified and documented prior to release for fabrication, assembly, shipping or installation;
- c. Requirements which assure that the method or location of markings do not affect the function or quality of an item;
- d. Establishment of identification requirements in purchase orders, contracts, specifications, drawings, procedures or instructions.

During the performance of quality activities for the Station nuclear power plants or ISFSI, the company may delegate any portion of the implementation of the identification and control program to a vendor. If delegated, contracts require that the vendor establish an identification and control program which meets this QAP requirements. Audits, surveillances, and inspections are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for identification and control of materials, parts and components.

Receipt inspections are performed to verify that materials, parts and components are properly identified in accordance with procurement requirements. Supply Chain

Management (SCM) is responsible for assigning and applying necessary identification to the items in accordance with applicable procedures to assure proper identification and traceability.

In the event that materials, parts or components are nonconforming or the identification becomes lost or illegible, the items are considered nonconforming and are identified and controlled in accordance with QAP 15.0, "Nonconforming Materials, Parts, Components, or Services".

## 9.0 CONTROL OF SPECIAL PROCESSES

### 9.1 GENERAL REQUIREMENTS

This QAP provides measures to assure the control of special processes associated with quality structures, systems, and components of the Millstone Power Station nuclear units and ISFSI by the use of qualified procedures, equipment and personnel.

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 quality activities performed for the Station's nuclear power plants or ISFSI, the responsible engineer assures that special process data and documentation is reviewed, and that vendor special process procedures utilized for the Station nuclear power plants or ISFSI are qualified and approved, and that personnel and equipment utilizing special processes are properly qualified prior to start of work. Audits, surveillances, and inspections are performed, as appropriate to verify that these vendors are effectively complying with their quality assurance program requirements for control of special processes.

The company special process procedures utilized during quality activities for the Station nuclear power plants or ISFSI are prepared, reviewed and approved in accordance with procedures as specified in QAP 5.0, "Procedures, Instructions, and Drawings".

#### 9.2.1 PROCEDURE QUALIFICATION AND CONTROL

The company procedures specify that written process control documents are utilized and qualified, as required, in accordance with the applicable specification, codes or standards.

#### 9.2.2 PERSONNEL QUALIFICATION AND CERTIFICATION

Codes, standards and the company 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, examinations, and certification renewal of personnel are also specified. Vendors qualify personnel and maintain records of qualified personnel in accordance with applicable codes, standards, specifications, and vendor purchase order/contract requirements.

The department that is contracting services is responsible for the review of records of qualified personnel, equipment and procedures associated with special processes. Supply Chain Management (SCM) or Nuclear Oversight shall provide an oversight function via audits, surveillances, or inspections, as appropriate.

Nuclear **Engineering** is responsible for assuring the training, testing, and certification of all the Millstone Power Station NDE personnel is in accordance with the **specifications and standards**.

### 9.2.3 SPECIAL PROCESS RECORDS

Records provide objective evidence that special processes were performed in accordance with applicable 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 vendor or supplied to the company as required by contract or purchase order. If records are to be retained by the vendor, 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 Station nuclear power plants or ISFSI, are kept current and maintained in appropriate company records retention facilities.



## 10.0 INSPECTION

### 10.1 GENERAL REQUIREMENTS

This QAP provides measures to assure that inspections of Millstone Power Station nuclear units and ISFSI quality structures, systems, and components to verify conformance with documented procedures, instructions and drawings are executed in accordance with procedures 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 the performance of quality activities for the Station nuclear power plants or ISFSI, procedures shall define the need for inspection (e.g., receipt inspection, installation, and product acceptance) to assure quality requirements are met.

Nuclear Oversight shall perform, as appropriate, audits and surveillances as defined in Nuclear Oversight procedures to verify that procedural requirements are met.

Nuclear Oversight shall perform inspections of modification and maintenance activities for quality structures, systems, and components. The criteria used to determine when Nuclear Oversight inspection shall be required for these activities and for the preparation of inspection plans shall be identified in Nuclear Oversight procedures. The Nuclear Oversight inspection function includes:

- a. Identification of inspection personnel;
- b. Review of work procedures and work documents for adequacy of inspection and mandatory hold points;
- 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.

Audits, surveillances, and inspections, are performed as appropriate, to verify that any vendor utilized to perform quality activities for the Station nuclear power plants or the ISFSI are effectively complying with their quality assurance program requirements for inspection and for the performance or witnessing of inspections at hold or notification points identified in procurement documents. Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, of onsite vendor activities in this area. All audit, surveillance, and inspection activities are performed under requirements specified in quality procedures.

### 10.2.2 INSPECTION PLANS

Documented inspection plans may be either a separate document or an integral part of work instruction documents. The plans are based on design specifications, procurement documents, drawings, other specifications, or previous experience, as appropriate.

During the performance of quality activities, procedures provide criteria for the determination of accuracy requirements of inspection equipment and when inspections are required. These procedures describe requirements for the preparation of inspection plans by Nuclear Oversight. Audits and surveillances are performed by Nuclear Oversight, as appropriate, to verify the implementation of the inspection plans.

The inspection criteria, including the use of inspection equipment and their accuracy requirements, are specified in the work procedures, work documents, or inspection plans.

### 10.2.3 INSPECTION PERSONNEL AND INSPECTION DOCUMENT ACCESS

Inspections are performed by individuals other than those who performed or directly supervised the activity being inspected. Inspection personnel are qualified and/or certified in accordance with appropriate codes, standards, and/or company training programs.

Inspections are performed by Nuclear Oversight personnel, qualified contracted personnel, and company personnel who are independent from undue pressure such as cost or schedule considerations. Nuclear Oversight shall assure the certification of its contracted inspection personnel is acceptable prior to the performance of inspection activities. When other departments are contracting for onsite quality assurance inspection services, these departments shall be responsible for the review and acceptability of personnel/equipment certification prior to the start of inspection activities. Nuclear Oversight shall perform audits and surveillances, as appropriate, to verify other department compliance with these requirements.

When vendors are contracted to perform onsite inspection services, their quality control inspection plans/procedures are reviewed and concurred with by Nuclear Oversight in accordance with QAP 5.0, "Procedures, Instructions, and Drawings".

Access to drawings, procedures, specifications or other documented criteria necessary for the performance of inspections is provided prior to performing the inspection activity.

#### 10.2.4 INSPECTION PROCEDURES

Required inspection or surveillance activities are performed and documented according to procedures and/or checklists. Inspection procedures, plans or checklists contain the following:

- a. Identification of characteristics to be inspected;
- b. Identification of the individual or groups responsible for performing the inspections;
- c. Requirements for the necessary measuring and test equipment and the required accuracy of this equipment;
- d. Acceptance criteria;
- e. A description of the method of inspection when other than direct visual examination using the unaided eye;
- f. A record of the results of the inspection;
- g. Record of inspector or data recorder.

Procedures specify surveillance of processing methods or testing and operation of equipment when inspection is impossible, inaccessible or not applicable.

Modification, repair, replacement, or rework items are inspected in accordance with original inspection requirements or approved alternatives.

#### 10.2.5 MANDATORY HOLD AND NOTIFICATION POINTS

Mandatory hold points are utilized when an inspection or operation must be performed or witnessed and signed off by the responsible personnel before work can proceed. Mandatory hold points are identified to assure attributes critical to achieving quality requirements at work completion have been verified. Mandatory notification points are used to identify the operations or completed processes that company or its representatives may elect to witness and/or inspect during the fabrication, construction and installation process. Mandatory hold points and notification points, as required, are identified in procurement documents and onsite work procedures/work documents. Procurement documents and onsite work procedures/work documents are subject to the review and concurrence for adequacy of inspection, notification and/or mandatory hold controls by Supply Chain Management (SCM) and Nuclear Oversight, respectively.

#### 10.2.6 INSPECTION RESULTS EVALUATION

Inspection results are evaluated for acceptability in accordance with applicable procedures which identify the responsible organization.

The evaluations are performed by the personnel who are qualified in accordance with the appropriate regulatory guide and endorsed ANSI standard listed in Appendix C.

Nuclear Oversight performs audits and surveillances, as appropriate, to verify that inspections are performed in accordance with the requirements of applicable procedures.

## 11.0 TEST CONTROL

### 11.1 GENERAL REQUIREMENTS

This QAP requires a documented test control program for Millstone Power Station nuclear units and ISFSI quality structures, systems, and components be established to assure that they will perform satisfactorily in service and that test results are documented in accordance with applicable regulatory and technical requirements.

The test control program identifies the quality structures, systems, 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 tests following repairs, reworks, replacements, preventive maintenance or modifications as required to verify performance will be satisfactory during operation.

### 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 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. Tests following repair, rework, replacement, preventive maintenance or modification is performed, as required, in accordance with the original design requirements of the item or acceptable alternatives, as applicable. A Test may be repeated when original test results are invalidated.

The company procedures delineate the methods and responsibilities for controlling, accomplishing and documenting testing of the Station nuclear power plants and ISFSI quality structures, systems, and components.

Vendors utilized to perform quality activities for the Station nuclear power plants and ISFSI are responsible for implementing measures for the control of tests to assure that materials, equipment and parts used in quality structures, systems, and components will perform satisfactorily. Audits, surveillances, and inspections, are performed as appropriate, to verify the performance of selected proof tests when hold points have been identified in purchase order/contracts and to verify these vendors are complying with their quality assurance program requirements for test control. Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, of onsite vendor activities in this area. Supply Chain Management (SCM) and Nuclear Oversight are responsible for assuring documentation associated with these verification activities are maintained in the appropriate files until forwarded to the appropriate company records retention facilities in accordance with applicable procedures.

Proof tests, product acceptance tests, post maintenance or modification tests, and periodic surveillance tests are conducted by qualified personnel in accordance with applicable procedures. Personnel performing tests assure 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 until forwarded to appropriate company records retention facilities in accordance with applicable procedures.

#### 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 criteria;
- d. Hold, notification, inspection points, if required, 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

The company procedures provide the criteria for determining when a test is required and the accuracy requirements of test equipment. The following steps are taken for the control of test equipment:

- a. To assure accuracy, test equipment is checked and calibrated in accordance with company 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 procedures.

The evaluation of test results may also be delegated to vendors. When delegated, the vendor 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. Audits, surveillances, and inspections, are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for test control. Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, of onsite vendor activities in this area.

## 12.0 CONTROL OF MEASURING AND TESTING EQUIPMENT

### 12.1 GENERAL REQUIREMENTS

This QAP provides measures for the control of measuring and testing equipment (M&TE) used as the basis for acceptance during inspection, testing, and measurement of materials, equipment, and parts affecting quality structures, systems, and components. Periodic calibration and adjustment of M&TE 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 CALIBRATION PROGRAM

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

Documentation associated with the calibration of all M&TE is maintained in appropriate files and retained as quality records in accordance with the company's Records Management Program. When the information for the control, use, and calibration of M&TE is in electronic form, this information is controlled and protected in accordance with applicable procedures.

The calibration program is implemented in accordance with the requirements defined in company procedures which describe the measures utilized to maintain the calibration of the M&TE. Functional groups are responsible for implementing these procedures which comply with the requirements contained in specifications and drawings. Procedures related to the M&TE calibration program are reviewed and approved by the appropriate on-site review committee or the Station Qualified Reviewer Program, as defined in applicable procedures. Supply Chain Management (SCM) or the appropriate M&TE custodian, as delineated by the purchase order, is responsible for verifying that receipt of calibrated equipment is in conformance with the requirements of procurement documents. Supply Chain Management (SCM) and Nuclear Oversight are responsible for control of calibrated M&TE used during their inspections.

Department heads/job supervisors are responsible to assure that M&TE is calibrated, issued, and controlled in accordance with the requirements of applicable procedures.

Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, to verify implementation of the calibration program.

Vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible for implementing measures for the control of M&TE to assure the M&TE are properly calibrated, adjusted and maintained at specified intervals in order to maintain accuracy within required limits. Audits, surveillances, and



inspections, are performed, as appropriate, to verify these vendors are effectively complying with their quality assurance program requirements for control of M&TE.

#### 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 permanently marked or tagged with a unique identification number and the date calibrated and next calibration date indicated on the M&TE.

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.

Calibration of this equipment should be against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated. When this is not possible, the standards shall have an accuracy that assures the equipment being calibrated shall be within required tolerance and the basis of acceptance is documented. In addition, the calibrating standards shall have greater accuracy than secondary standards being calibrated. Calibrating standards with the same accuracy may be used if they can be shown to be adequate for the requirements and the basis of acceptance is documented.

#### 12.2.3 "OUT OF TOLERANCE" CONTROL

M&TE and reference standards when found out of tolerance are so identified and removed from service. A timely review is conducted to determine the validity of previous inspection or test results gained through use of the instrument, and of the acceptability of items previously measured or tested. Where it is determined that use of out of tolerance measuring and test equipment may have resulted in a condition adverse to quality, the condition is promptly identified and corrective action is implemented in accordance with QAP 15, "Nonconforming Materials, Parts, Components or Services" and QAP 16, "Corrective Action" respectively as appropriate.

## 13.0 HANDLING, STORAGE AND SHIPPING

### 13.1 GENERAL REQUIREMENTS

This QAP provides measures to assure proper handling, storage, shipping, cleaning and preservation of materials, equipment and parts used for Millstone Power Station nuclear units and ISFSI quality structures, systems, and components in order to preclude damage, loss or deterioration.

### 13.2 IMPLEMENTATION

#### 13.2.1 GENERAL

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

Handling, storage, shipping, cleaning and preservation of materials, equipment and parts is conducted in accordance with applicable procedures and procurement documents. Vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible for implementing measures for handling, storage, shipping, cleaning and preservation of materials, equipment and parts to preclude damage, loss or deterioration. Audits, surveillances, and inspections, are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for handling, storage, shipping, cleaning and preservation of materials, equipment 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 applicable procedures. These established requirements are consistent with the regulatory positions of the NRC regulatory guides and their endorsed ANSI standards listed in Appendix C, or specifications and/or vendor technical manuals, and shall be consistent with accepted industry standards.

The company procedures describe the measures taken for the storage of chemicals, reagents (including control of shelf life), lubricants, and other consumable materials.

## 14.0 INSPECTION, TEST AND OPERATING STATUS

### 14.1 GENERAL REQUIREMENTS

This QAP 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 materials, equipment and parts to preclude the inadvertent bypassing of inspection and test requirements during quality activities performed for the Millstone Power Station nuclear units and ISFSI. 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 quality structures, systems, and components to prevent inadvertent operation.

### 14.2 IMPLEMENTATION

#### 14.2.1 GENERAL

Vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible for implementing approved measures for the identification of inspection and test status of quality material, equipment and parts to preclude the bypassing of requirements. Audits, surveillances, and inspections, are performed, as appropriate, to verify that these vendors are effectively complying with their quality assurance program requirements for identification of inspection and test status. Elements of this system require that vendors have a controlled fabrication 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 fabrication, 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 Station, Supply Chain Management (SCM) assures that traceability is maintained for acceptable quality materials, equipment and parts to indicate conformance to purchase order/contract requirements with the exception of nuclear fuel assemblies, for which traceability is maintained by Nuclear Fuel Engineering. Nonconforming materials, equipment and parts are identified in accordance with QAP 15.0, "Nonconforming Materials, Parts, Components, or Services."

During tests and inspections of the Station nuclear power plants or ISFSI, a status tagging system is implemented by procedure to prevent inadvertent operations of quality structures, systems, and components.

The company procedures describe the measures taken to control the altering of the sequence of required tests, inspections and other operations. The review and approval for these actions is subject to the same control as taken during the original review and approval of tests, inspections and other operations.

#### 14.2.2 STATUS IDENTIFICATION AND CONTROL

Procedures and instructions describe control of the application and removal of markings such as stamps, tags, labels, and other suitable means to indicate the

status of quality structures, systems, and components to prevent inadvertent operation, and to preclude omission of inspections, tests or other critical operations. These procedures and instructions delineate the requirements, methods and responsibilities for indicating the status of the affected items. The status of all items requiring calibration is recorded and maintained in accordance with applicable procedures.

Records associated with status identification are maintained in accordance with applicable procedures.

## 15.0 NONCONFORMING MATERIALS, PARTS, COMPONENTS OR SERVICES

### 15.1 GENERAL REQUIREMENTS

This QAP requires the documentation and control of nonconforming materials, parts, components, or services be performed in accordance with procedures to prevent inadvertent use or installation in Millstone Power Station nuclear units and ISFSI quality structures, systems, or components. These procedures include requirements for identification, documentation, segregation and disposition of nonconforming items; and notification to affected organizations.

### 15.2 IMPLEMENTATION

#### 15.2.1 PROGRAM

Procedures define personnel responsibilities and establish various measures for identification, documentation, segregation, review and disposition of nonconforming item reports. The means for reporting nonconforming items are available to all company and vendor personnel assigned at the Millstone Power Station and other personnel involved with Station quality activities.

#### 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.

Tagging systems are utilized to physically identify nonconforming items prior to installation. Supply Chain Management (SCM) utilizes tags for received materials, parts and components.

#### 15.2.3 EVALUATION AND DISPOSITION

Evaluations are performed to determine the disposition of nonconforming items and services. The evaluation determines whether an item or service is to be used as is, returned to vendor, repaired, reworked, scrapped or salvaged. An engineering evaluation is performed, if necessary, prior to the resolution of nonconforming conditions. In addition, nonconformances are evaluated for impact on quality structure, system and component operability in accordance with applicable procedures. These evaluations assure that the final condition does not adversely affect safety, operation or maintenance of the item or service. Nonconforming item reports involving deviation from design bases such as "use as is" or "repair" are forwarded to the appropriate engineering organization for review, and disposition. Applicable information is accumulated and records are maintained.

The need to release/use nonconforming materials, parts or components shall be based on such considerations as:

- a. Impact on plant or ISFSI safety;

- b. Safety of personnel;
- c. Suitability of items in the "as is" condition, i.e., probability of eventual satisfactory resolution of the nonconforming condition without repair, rework or replacement;
- d. Accessibility of items after release;
- e. Cost of removal and repair or replacement should items eventually have to be removed, repaired, or replaced;
- f. Effect on the orderly progress of work.

Items repaired are verified by inspecting the items as originally inspected or by a documented method which is equivalent to the original inspection method. Items reworked may require inspection to verify conformance to requirements as defined in applicable procedures.

Nuclear Oversight performs audits and surveillances, as appropriate, to verify that dispositions for reports documenting nonconforming conditions are adequate.

#### 15.2.4 RECURRENCE CONTROL

A trend analysis of nonconforming conditions documenting program/procedural problems is performed in accordance with procedures. The trend analysis results are periodically reported to upper management, including the senior onsite and offsite nuclear officers and the senior manager responsible for measuring the effectiveness of the quality assurance program, for review and assessment as part of the Station Corrective Action Program reporting as described in QAP 16.0, Corrective Action.

## 16.0 CORRECTIVE ACTION

### 16.1 GENERAL REQUIREMENTS

This QAP requires that an effective corrective action program be established to assure that conditions adverse to quality at the Millstone Power Station are promptly identified, corrected, and documented in accordance with procedures. These procedures include measures for reporting to appropriate levels of management and determining the root cause and corrective action to preclude recurrence for conditions evaluated as significant conditions adverse to quality.

### 16.2 IMPLEMENTATION

#### 16.2.1 PROGRAM

Procedures define personnel responsibilities and establish various measures for identification, documentation, review, engineering evaluation, disposition and correction of conditions adverse to quality. The means to identify conditions adverse to quality are available to all company and vendor personnel assigned to the Millstone Power Station and other personnel involved with Station quality activities.

#### 16.2.2 CORRECTIVE ACTION AND FOLLOW-UP

Procedures describe the measures taken to evaluate if conditions adverse to quality exist and to determine the need for immediate corrective action or disposition. Vice Presidents are responsible for assuring their assigned personnel and their vendors working onsite comply with the corrective action program and for assuring that corrective action is adequate and properly implemented in a timely manner within their organization. Nuclear Oversight performs audits and surveillances, as appropriate, to verify that company departments are effectively complying with this QAP and procedural requirements for the corrective action program and that corrective action is adequate and properly implemented in a timely manner. Audits, surveillances, and inspections, are performed, as appropriate to assure that vendors comply with their corrective action program and that corrective action is adequate.

The Site Vice President - Millstone has the final authority in the event that agreement on the action to be taken is not reached at lower levels of the nuclear organization.

### 16.2.3 RECURRENCE CONTROL

Procedures identify responsibility and provide direction for determining appropriate significance level based on actual or potential consequences for conditions adverse to quality.

The significance level determines the need for a root cause determination and for establishing the necessary action to prevent recurrence. In cases of significant conditions adverse to quality, the immediate corrective action, the cause, and recurrence control actions must be documented. Procedures establish the responsibilities and measures taken to accomplish these actions.

An analysis of adverse conditions is performed and trends which identify program/procedure problems are periodically reported to upper management, including the senior onsite and offsite nuclear officers and the senior manager responsible for measuring the effectiveness of the quality assurance program for review. Adverse trends concerning specific vendor performance shall be reported to the affected vendor for resolution and recurrence control, as appropriate.



## 17.0 QUALITY ASSURANCE RECORDS

### 17.1 GENERAL REQUIREMENTS

This QAP requires the maintenance, identification, retention and retrieval of records to furnish evidence of quality activities performed for the Millstone Power Station nuclear units and ISFSI be implemented in accordance with procedures. These records include but are not limited to: operating logs and the results of reviews, inspections, tests, audits, monitoring of work performance and material analyses. These records also include closely related data such as qualifications of personnel, procedures and equipment. 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. ISFSI records must meet the requirements of 10 CFR 72.174. Procedures establish requirements concerning record retention such as duration, location and assigned responsibility.

### 17.2 IMPLEMENTATION

The company procedures establish the responsibilities and requirements for the maintenance, identification, retention (e.g., duration, location) and retrievability of records pertaining to materials, equipment, parts, processes or operations relating to quality structures, systems, and components which when founded on observations, measurements or tests can be fully verified, and documented by cognizant personnel.

Vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible to implement measures for identification, maintenance, retention, retrieval and turnover to the company of documented and approved records which contain objective evidence of quality as specified in purchase orders/contracts. Audits, surveillances, and inspections, are performed, as appropriate, to verify that these vendors are effectively complying with their program for quality assurance records.

The company quality assurance records are identified, controlled and maintained in appropriate files and are identifiable to specific structures, systems, and components within the Station nuclear power plants or ISFSI. When identification to a specific structure, system, or component is not practical, records are filed by category (e.g., specification, nonconformance reports, audits, etc.).

### 17.3 RETENTION

The company quality assurance records are classified as life records or non-life records as delineated by "Nuclear Procedures and Document Administration". Non-life records are those documents that are maintained for a specific period of time other than the lifetime of a Station nuclear power plant or ISFSI or the particular component or part. Life records are those documents that are maintained for the lifetime of the in-service nuclear power plant or ISFSI or for the life of the particular component or part. In instances where more than one licensing basis document specifies a record retention requirement and they are different (e.g. QA Program commitment versus Unit Technical Specifications) the more

restrictive requirement shall apply. Life records are those which would be of significant value in meeting one or more of the following criteria:

- a. Demonstrating capability for safe operations;
- b. Maintaining, reworking, repairing, replacing or modifying the item;
- c. Determining the cause of an accident or malfunction of an item;
- d. Providing required base line data for in-service inspection.

Quality assurance records are reviewed and approved by the cognizant qualified company personnel and vendors, as appropriate, and are transmitted to the company records retention facilities. The responsibility of the company records retention facilities upon receipt of records is to maintain and provide controlled retrievability of records affecting the Station nuclear power plants or ISFSI, in such a manner as to prevent destruction of records by fire, flood, theft, and environmental conditions, such as temperature or humidity, as delineated in applicable procedures.

Quality Assurance Records are maintained in accordance with the NRC regulations, commitments to ANSI N45.2.9-1974, NRC Regulatory Guide 1.88, administrative procedures, and specific requirements for those Quality Assurance records stored on optical disks.

Quality Assurance records stored electronically will follow the guidance given in the Nuclear Information and Records Management Association (NIRMA) technical guideline, TG-15-1998, "Management of Electronic Records".

The following requirements apply to all Quality Assurance records which are stored on electronic storage media:

- Quality Assurance records will only be stored on appropriate electronic storage media meeting the requirements of the NIRMA guidelines. Determination of appropriate electronic media will be made by Information Technology based upon data format and level of access required.
- Quality Assurance records originally created in hard-copy form will be retained in hard-copy until such time as electronic versions of these Quality Assurance records are created, copied, and verified as legible on two (2) independent copies of an appropriate electronic storage media. File legibility verifications will be completed on all Quality Assurance records stored on electronic storage media by either visually verifying the file legibility or by electronically verifying exact binary file transfer.
- Periodic media inspections to monitor image degradation will be conducted in accordance with the media manufacturer's recommendations. These periodic inspections will be documented.
- Quality Assurance records stored on electronic media will be refreshed or copied onto new media and subsequently verified if the projected lifetime of that media does not exceed the retention period of the records stored on that media.
- Quality Assurance records originally created in electronic form may be retained in electronic form. Backup copies of associated electronic Quality Assurance records will be maintained in multiple physically independent electronic locations until such time as

images of these Quality Assurance records are created, copied, and verified on two (2) copies of an appropriate electronic storage media. The two copies of electronic storage media will then be stored in separate physical locations.

These requirements meet the intent of Generic Letter 88-18, "Plant Record Storage on Optical Disks", dated October 20, 1988.

## 18.0 AUDITS

### 18.1 GENERAL REQUIREMENTS

This QAP requires that a comprehensive system of planned and periodic audits shall be carried out to verify that quality activities for Millstone Power Station nuclear units are performed in compliance with this QAP and to determine the effectiveness of the program.

Audits are conducted in accordance with written procedures or 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 Station nuclear power plant and ISFSI quality activities under the oversight of the Management Safety Review Committee (MSRC). Audits are performed on activities where the requirements of 10 CFR 50, Appendix B and respective nuclear unit Technical Specifications are being implemented. In addition to those activities, audits are performed on areas associated with indoctrination and training programs, interface control among the company and vendors, vendor quality programs and the Supply Chain Management (SCM) procurement function. 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.

Schedules for the audit of Corporate and Station, quality activities are originated and maintained by Nuclear Oversight. Schedules for vendor quality assurance activities are maintained by Supply Chain Management (SCM) and Nuclear Oversight, as appropriate.

Audits are performed as specified in procedures by qualified personnel, using an audit plan prepared by the auditing organization. Audits may include evaluation of the work areas, activities, processes, items, and review of documents and records to determine the effectiveness of implementation and conformance to this QAP.

Approved vendors utilized to perform quality activities for the Station nuclear power plants or ISFSI are responsible for developing and implementing a system of planned and periodic audits to verify compliance with and to determine the effectiveness of all aspects of their quality assurance program. Supply Chain Management (SCM) is responsible for verifying the acceptability of vendor audit programs. Audits, are performed as appropriate, to verify that these vendors are effectively complying with their quality assurance requirements.

In addition to the audits, other methods, such as surveillances and inspections are used to assure that quality activities are in compliance with this QAP.

#### 18.2.2 REPORTING OF AUDIT RESULTS

Audit results are reviewed, approved, and reported in accordance with Nuclear Oversight and Supply Chain Management (SCM) procedures, as applicable. The audit reports are issued to the appropriate management of the area audited to assure appropriate and/or timely corrective action is taken to address conditions adverse to quality identified by the audit findings. In addition, audit data and reports are accumulated as part of the review for quality trends and assessed to assure the effectiveness of this QAP.

Audit reports and follow up of audit item reports will be distributed to the Senior Vice President/Chief Nuclear Officer (SVP/CNO) - Dominion Nuclear Connecticut, Inc., the Senior Vice President - Nuclear Operations, the Site Vice President - Millstone and the Director - Nuclear Oversight.

#### 18.2.3 REVIEW, ACTION, AND FOLLOW-UP OF AUDIT FINDINGS

Audit findings that involve conditions adverse to quality are reviewed and investigated by the management having the responsibility for the area audited. The responsible management is required to take the necessary action to address any conditions adverse to quality identified by the audit and: report the results of such reviews and investigations, take the necessary actions to correct problems reported, and report the completion of corrective action within specified time frames.

Follow-up of audit findings involving conditions adverse to quality is performed by the auditing organization as necessary to verify appropriate actions have been taken to resolve audit findings. Items that cannot be resolved by affected management are submitted to the Director - Nuclear Oversight for resolution with the responsible Vice President or the Senior VP - Nuclear Operations, with final resolution by the Senior Vice President/Chief Nuclear Officer.

#### 18.2.4 RECORDS/REPORTS OF AUDITS

Audit records, reports, and associated documentation are retained in the company records retention facilities, as specified in applicable procedures.