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Dominion

Memorandum

NO-02-0119
September 19, 2002

TO: Quality Assurance Program Topical Report - Controlled Copy Owners

FROM: 
Dorothy Bruce, QAP Coordinator
Nuclear Oversight, Ext. 3185

SUBJECT: **Quality Assurance Program (QAP) Topical Report - Millstone Power Station
Revision 23, Change 10 (Document No. MP-02-OST-BAP01)**

Enclosed please find Quality Assurance Program (QAP) Topical Report - Millstone Power Station, Revision 23, Change 10. The change replaces the Nuclear Safety Assessment Board (NSAB), reporting to Site Vice President, with the Management Safety Review Committee (MSRC), reporting to the Senior Vice President/Chief Nuclear Officer (SVP/CNO). Revision 23, Change 10 modifies QAP 1.0, Figure 1.0, and QAP Appendix F, replacing the NSAB with Management Safety Review Committee (MSRC) for functions and responsibilities. In addition, the SVP/CNO now appoints the Chairperson, who then appoints committee members and alternates. QAP 2.0 and QAP 3.0 is modified to replace "NSAB" will be replaced with "offsite review committee" consistent with generic terms used in the QAP. The change maintains all organizational roles and responsibilities.

Please note that the effective date of Revision 23, Change 10, is **September 20, 2002**. Please replace the entire contents of QAP 1.0, QAP 2.0, and QAP 3.0, and QAP Appendix F with the enclosed change. If you have any questions, please contact D. Bruce at X3185.

Attachments: Summary of Changes for Rev. 23, change 10

Enclosure:

Quality Assurance Program Topical Report - Millstone Power Station, Revision 23, Change 10

DSB/dsb

Summary of Changes to QAP Rev. 23 Incorporated as Change 10

<u>Section</u>	<u>Summary Description of Changes</u>	<u>Reference</u>
Section 1.0	Replaces the Nuclear Safety Assessment Board (NSAB), reporting to Site Vice President with the Management Safety Review Committee (MSRC), reporting to the Senior Vice President/ Chief Nuclear Officer (SVP/CNO).	Request 02-10
Section 2.0	"NSAB" is replaced with "offsite review committee", reflecting the change but more consistent with generic terms used in the QAP.	Request 02-10
Section 3.0	"NSAB" is replaced with "offsite review committee", reflecting the change but more consistent with generic terms used in the QAP.	Request 02-10
Appendix F	Replaces the Nuclear Safety Assessment Board (NSAB), reporting to Site Vice President with the Management Safety Review Committee (MSRC), reporting to the Senior Vice President/ Chief Nuclear Officer (SVP/CNO).	Request 02-10

1.0 ORGANIZATION

1.1 INTRODUCTION

This section describes the organizations involved in the operation and technical support of Millstone Power Station (MPS). In addition, this section describes the responsibilities governed by the Quality Assurance Program (QAP) Topical Report. Qualifications for key personnel are found in the unit Technical Specifications and Appendix B of this QAP, "Qualification and Experience Requirements."

NOTE

In the remainder of QAP 1.0, the text describes functions that support Millstone Power Station, unless otherwise specified. Units 2 and 3 are operational. Unit 1 is defueled and in a decommissioning mode. Applicable regulations and standards are addressed throughout the QAP as appropriate.

1.2 ORGANIZATION

The Chief Executive Officer - Dominion Nuclear Connecticut, Inc. has ultimate responsibility and overall authority for the Dominion Nuclear Connecticut, Inc. nuclear program, and has delegated the necessary responsibility and authority for all Nuclear Operations to the President and Chief Operating Officer - Dominion Nuclear Connecticut, Inc. who has delegated the necessary responsibility and authority to the Senior Vice President - Nuclear Operations and Chief Nuclear Officer (SVP/CNO) - Dominion Nuclear Connecticut, Inc.

1.3 KEY MANAGEMENT RESPONSIBILITIES AND AUTHORITY

1.3.1 Site Vice President - Millstone

The Site Vice President - Millstone has been delegated by the SVP/CNO - Dominion Nuclear Connecticut, Inc. the necessary responsibility and authority for the management and direction of all activities related to the operation of Millstone Power Station. The Site Vice President - Millstone has overall responsibility for construction, operation, maintenance, modification, quality assurance and implementation of this QAP at Millstone Power Station. The following licensing basis positions report directly to Site Vice President - Millstone:

- Director - Nuclear Station Operations & Maintenance
- Director - Nuclear Station Safety & Licensing

1.3.2 Director - Nuclear Station Operations & Maintenance

Director - Nuclear Station Operations & Maintenance is responsible for establishing common policies and standards pertaining to the operating units, the safe operation and maintenance of the units, including the decommissioning and related activities for Unit 1, for services in support of the station, and implementation of this QAP. The Director - Nuclear Station

Operations & Maintenance is responsible for maintaining compliance with requirements of the Operating License and Technical Specifications as well as applicable federal, state and local laws, regulations and codes. The following departments report directly to the Director - Nuclear Station Operations & Maintenance:

- Nuclear Operations
- Nuclear Maintenance
- Nuclear Site Services
- Nuclear Outage and Planning

In addition, the Director - Nuclear Station Operations & Maintenance is responsible for Unit 1 Decommissioning Activities.

Nuclear Training and Supply Chain Management are matrixed to the Director - Nuclear Station Operations & Maintenance.

1.3.3 Director - Nuclear Station Safety & Licensing

Director - Nuclear Station Safety & Licensing is responsible for implementation of this QAP. The following departments report directly to the Director - Nuclear Station Safety & Licensing:

- Nuclear Procedures & Document Administration
- Radiological Protection & Chemistry
- Nuclear Organizational Effectiveness

Emergency Preparedness, Protection Services and Information Technology are matrixed to the Director - Nuclear Station Safety & Licensing.

Nuclear Training, Emergency Preparedness, and Protection Services all report to the Vice President - Nuclear Support Services in the Nuclear Business Unit. Security and Fire Protection are part of Protection Services. Nuclear Engineering reports to the Vice President - Nuclear Engineering and Services in the Nuclear Business Unit.

1.3.4 Manager - Nuclear Oversight

The Manager - Nuclear Oversight reports to the Director - Nuclear Oversight. Manager - Nuclear Oversight is responsible to the Director- Nuclear Oversight for the effective performance of Nuclear Oversight. The Manager - Nuclear Oversight acts as advisor to the Site Vice President - Millstone and the SVP/CNO - Dominion Nuclear Connecticut, Inc. on items related to nuclear quality and safety at the station. Overall responsibility for the QAP has been delegated to the Manager - Nuclear Oversight by the SVP/CNO - Dominion Nuclear Connecticut, Inc. The Manager - Nuclear Oversight has the necessary authority and responsibility for the following:

- Direction of the quality assurance program
- Development and implementation of policies, plans, requirements, procedures, and audits

- Verification to assure compliance with 10CFR50 Appendix B and other regulatory requirements
- Verification of the implementation of the QAP Topical Report requirements
- Preparation and issuance of the QAP Topical Report
- Identification of quality problems
- Recommendations for solutions to quality problems and verification of the implementation of the solutions

Verification is performed through a planned program of audits, surveillances and inspections by Nuclear Oversight. The Manager - Nuclear Oversight provides objective evidence to management of the performance of quality activities independent of the individual or group directly responsible for performing the specific activity.

The Manager - Nuclear Oversight has the authority and organizational freedom to verify activities affecting quality. This is performed independent of undue influences and responsibilities for schedules and costs.

In order to implement these responsibilities, the Manager - Nuclear Oversight is provided "Stop Work" authority whereby he/she can suspend unsatisfactory work and control further processing or installation of non-conforming materials. The authority to stop work is assigned to Nuclear Oversight personnel and delineated in an approved procedure.

1.3.5 Nuclear Maintenance

Nuclear Maintenance is responsible for on-line maintenance, cost and scheduling, installation, maintenance, alterations, adjustment and calibration, replacement and repair of plant electrical and mechanical equipment, and instruments and controls. Responsibilities include scheduling of surveillances required by Technical Specifications, establishing standards and frequency of calibration for instrumentation and ensuring instrumentation and related testing equipment are properly used, inspected and maintained.

1.3.6 Nuclear Operations

Nuclear Operations is responsible for operations. The Manager - Nuclear Operations is responsible for the safe and efficient operation of the units including Unit 1, which is in a decommissioned mode. During accident situations, if currently holding an active license on the unit (Senior Reactor Operator (SRO) for Unit 2 or 3, or Certified Fuel Handler (CFH) for Unit 1 related responsibilities, the Manager - Nuclear Operations may relieve the Shift Manager of the responsibility of directing the licensed Control Room operators. The following groups report to the Manager - Nuclear Operations:

- Unit Nuclear Operations
- Nuclear Operations Support
- Nuclear Operations Work Control

1.3.7 Unit Nuclear Operations

The Unit Nuclear Operations groups report to the Manager - Nuclear Operations. Each group includes the following key supervisory positions:

- Supervisor - Nuclear Shift Operations
- Shift Manager(s)
- Unit Supervisor(s)

Unit 2 Nuclear Operations is responsible for operations regarding the Unit 1 Spent Fuel Pool Island and auxiliary systems. The transfer of Unit 1 operations responsibility to Unit 2 Nuclear Operations does not impact the capability of Unit 2 Operators to perform their duties, including day-to-day functions and accident and transient mitigation.

1.3.7.1 Supervisor - Nuclear Shift Operations

The Supervisor - Nuclear Shift Operations provides general supervision for the operation of the respective unit, and coordinates unit operations with maintenance, work management, and other groups. As stipulated in Technical Specifications or in Appendix B, either the Manager - Nuclear Operations or the Supervisor - Nuclear Shift Operations holds an appropriate license on the Unit (SRO for Unit 3 and SRO and CFH for Unit 2). Unit 2 Operations is responsible for operations regarding the Unit 1 Spent Fuel Pool Island and auxiliary systems. The Supervisor - Nuclear Shift Operations assures the safe and efficient operation of the assigned unit in accordance with applicable licenses, operating instructions and procedures, emergency procedures and safety rules and regulations. During accident situations, if currently holding an active license on the unit (SRO for Unit 3 and Unit 2, CFH for Unit 2 responsibilities for Unit 1 Spent Fuel Pool and related systems), the Supervisor - Nuclear Shift Operations may relieve the Shift Manager of the responsibility of directing the licensed Control Room operators.

1.3.7.2 Shift Managers

The Shift Managers report to the Supervisor - Nuclear Shift Operations and are responsible for the Control Room command function. The Shift Manager holds an appropriate license on the unit (SRO for Unit 3; SRO and CFH for Unit 2). The Shift Manager directs and supervises the operation of the unit. Administrative functions that detract from or are subordinate to the management responsibility for assuring the safe operation of the plant are delegated to other operational personnel not on duty in the Control Room. Unit 2 Control Room provides control and supervision of Unit 1 activities.

During accident situations, unless properly relieved, the Shift Manager remains in the Control Room and directs the activities of the licensed operators. The Shift Manager has direct authority to shut down the respective unit if, in the Shift Manager's opinion, serious abnormal conditions exist. A Unit 3 Shift Manager fulfills the facility staff requirements of the Shift Supervisor for the Unit 3 Technical Specifications.

1.3.7.3 Unit Supervisor

The Unit Supervisor holds an appropriate license on the unit (SRO) and supervises the operators in the Control Room. The Unit Supervisor directs activities of the licensed Control Room operators, and may operate the controls of equipment and piping systems from the Control Room, or alternate station control location. Unit 2 Control Room provides control and supervision of activities on Unit 1.

1.3.7.4 Control Operators

Control Operators for Millstone Units 2 and 3 hold a Reactor Operator or Senior Reactor Operator license on the unit. The Control Operators are responsible to perform the following duties:

- Start up, operate, and shut down nuclear plant equipment including, but not limited to, as applicable to the Unit's status, reactor, reactor auxiliaries, turbine generator unit and its auxiliaries as necessary to satisfy system requirements or station conditions. (Unit 1 is decommissioned.)
- Test, as scheduled, control room instruments and controls. Unit 1 is decommissioned.
- Maintain required logs and calculations, observe these logs for indications of faulty operation, and notify the on-duty Unit Supervisor or the Shift Manager of abnormal plant conditions

1.3.7.5 Plant Equipment Operators

Plant Equipment Operators are responsible to perform the following duties:

- Start up, operate, inspect, adjust, and shut down all auxiliary and other various plant equipment
- Perform or assist with scheduled operational tests
- Make minor repairs

1.3.8 Nuclear Outage & Planning

Nuclear Outage & Planning is responsible for planning, online-maintenance and outage activities.

1.3.9 Nuclear Site Services

Nuclear Site Services is responsible for project support of the station, including project construction and project controls.

1.3.10 Nuclear Procedures & Document Administration

Nuclear Procedures & Document Administration is responsible for nuclear records management and procedures.

1.3.11 Radiological Protection & Chemistry

Radiological Protection & Chemistry carries out chemistry and health physics functions and reports to the Director - Nuclear Station Safety and Licensing. This reporting relationship provides radiation protection functions with sufficient organizational freedom and independence from operating pressures as required by the unit Technical Specifications. The Supervisor - Health Physics fulfills the "Health Physics Manager" position qualifications required by the unit Technical Specifications. Radiological Protection & Chemistry includes the following:

- scheduling and conducting radiological surveys including contamination sample collection
- determining contamination levels and assigning work restrictions through radiation work permits
- maintaining records and reports on radioactive contamination levels
- administering the personnel monitoring program and maintaining required records in accordance with federal and state codes
- Chemistry

1.3.12 Nuclear Organizational Effectiveness

Nuclear Organizational Effectiveness is responsible for the Corrective Actions Program, the Independent Safety Engineering Group, the Operating Experience Program and Shift Technical Advisors. Nuclear Organizational Effectiveness reports directly to the Director - Nuclear Station Safety and Licensing, and is matrixed to the Director - Organizational Effectiveness.

1.3.13 Emergency Preparedness

Emergency Preparedness is responsible for development and maintenance of the on-site radiological emergency plan and the development and coordination of required off-site radiological emergency response plan. Emergency Preparedness reports to the Director - Protective Services & Emergency Preparedness and is matrixed to the Director - Nuclear Station

Safety & Licensing.

1.3.14 Nuclear Protection Services

Nuclear Protection Services is responsible for station protective services, including security and fire protection. Nuclear Protection Services reports to the Director - Protective Services & Emergency Preparedness (corporate) and is matrixed to the Director - Nuclear Station Safety & Licensing.

1.3.15 Nuclear Training

Nuclear Training is responsible for operator and technical training. The operator training group reports to the Director - Nuclear Training (corporate) to provide sufficient organizational freedom and independence from operating pressures as required by the unit Technical Specifications. Nuclear Training is matrixed to the Director - Nuclear Station Operations and Maintenance.

1.3.16 Nuclear Engineering

Nuclear Engineering reports to the Director - Nuclear Engineering. Nuclear Engineering is responsible for design engineering functions, supporting activities, engineering programs, configuration management including design and configuration control and engineering assurance, engineering technical support and systems engineering, including material engineering. The Director - Nuclear Engineering reports to the Vice President - Nuclear Engineering (corporate) and is matrixed to the Site Vice President.

Nuclear Fuel Engineering reports to the Director - Dominion Nuclear Analysis and Fuel. The group is responsible for engineering activities in safety analysis and nuclear fuel, including probabilistic risk assessment and reactor and radiological engineering. Nuclear Fuel Engineering is matrixed to the Director - Nuclear Engineering.

1.3.17 Supply Chain Management (SCM)

Supply Chain Management (SCM) is responsible for procurement. Responsibilities include approval and oversight of vendors that provide quality-related material and services including source and receipt inspection. Supply Chain Management (SCM) reports to the Director - Dominion Supply Chain Management (Generation), and is matrixed to the Director - Nuclear Station Operations & Maintenance.

1.3.18 Information Technology

Information Technology is responsible for the Quality Assurance Software Program. Information Technology reports to the Director - Dominion Information Technology Business Account (Generation), and is matrixed to the Director - Nuclear Station Safety & Licensing.

1.4 QUALITY-RELATED RESPONSIBILITIES COMMON TO ALL DEPARTMENT HEADS

The head of each department performing quality activities is responsible for:

- Administering those activities within their organization which are required by this QAP;
- Ensuring implementation of the Quality Assurance Program;
- Establishing and clearly defining the duties and responsibilities of personnel within their organization who perform quality activities;
- Planning, selecting, and training personnel to meet the requirements of the QAP Topical Report; and
- Performing and coordinating quality activities within their department and interfacing with the Nuclear Oversight department.

Each individual performing or verifying activities affecting quality is responsible to conduct those activities in accordance with the requirements of this QAP and implementing procedures. These individuals shall have direct access to such levels of management as may be necessary to perform this function.

The responsibility, authority, and organizational relationship for performing quality activities within each organization is established and delineated in the Dominion Nuclear Connecticut, Inc. organizational charts, policy statements, and written job or functional descriptions.

Vendors may be delegated the execution of quality assurance functions; however, the licensee shall retain responsibility for this Quality Assurance Program.

1.5 ANNUAL MANAGEMENT QUALITY ASSURANCE REVIEW

The Senior Vice President - Nuclear Operations and Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. is responsible for the assessment of the scope, status, implementation, and effectiveness of the QAP. To meet this responsibility, a team of qualified individuals is appointed to perform an annual Management Quality Assurance Review. The team is made up of individuals knowledgeable in quality assurance, quality activities, auditing, management responsibilities, and the QAP Topical Report. This review is:

- A systematic evaluation;
- pre-planned toward the objective of determining the adequacy of the QAP and its compliance with Appendix B to 10 CFR 50 and other regulatory requirements; and
- capable of identifying, communicating, and tracking any required corrective action.

The Senior Vice President - Nuclear Operations and Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. has delegated the responsibility for the Management Quality Assurance Review to the Manager - Nuclear Oversight.

1.6 SPECIFIC QAP RESPONSIBILITIES

The Senior Vice President - Nuclear Operations and Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. resolves all disputes related to the implementation of the QAP for which resolution is not achieved at lower levels within the organization.

1.7 SUCCESSION OF RESPONSIBILITY FOR OVERALL PLANT OPERATION

The succession of responsibility for overall plant instructions or special orders, in the event of absences, incapacitation of personnel or other emergencies, is as follows:

- Site Vice President - Millstone
- Director - Nuclear Station Operations & Maintenance
- Manager - Nuclear Operations
- Licensed Supervisor - Nuclear Shift Operations designated by Site Vice President - Millstone
- Shift Manager (SRO)
- Licensed Unit Supervisor (SRO)

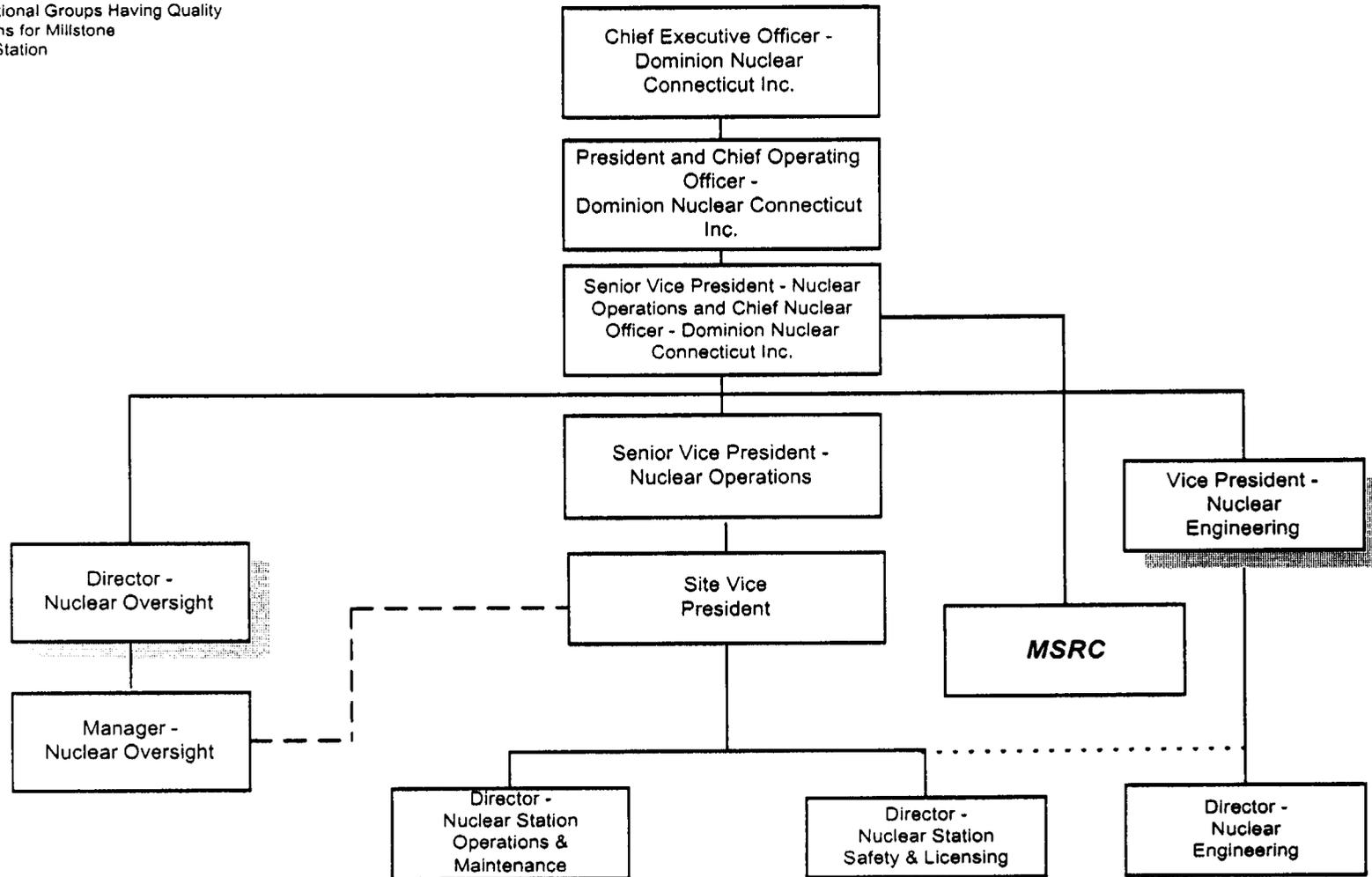
1.8 ORGANIZATION CHARTS

NOTE

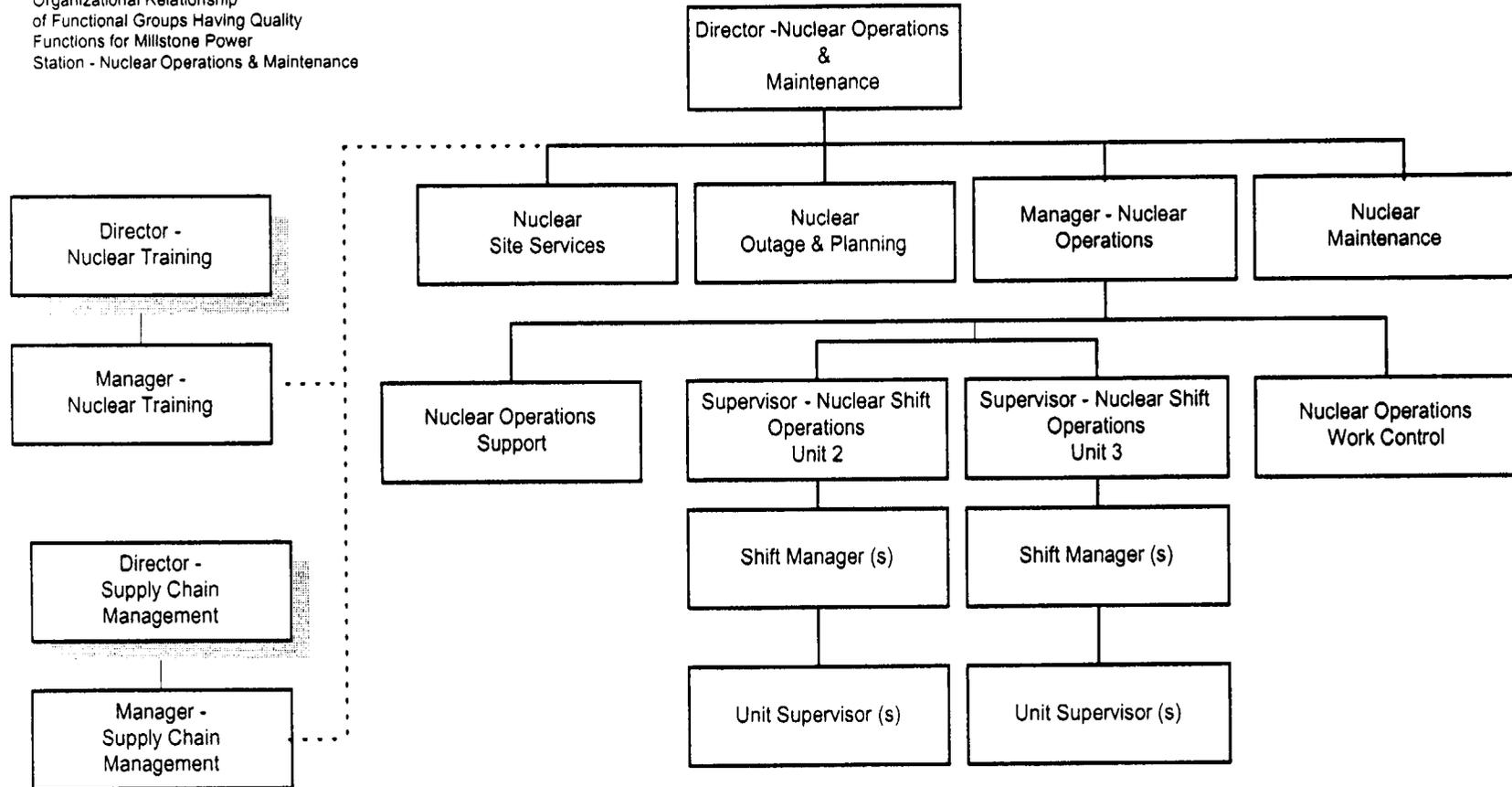
The following organization charts are incorporated by reference in the Emergency Plan - Millstone Power Station. Changes to these organization charts require an effectiveness review in accordance with 10 CFR 50.54 (q).

Offsite Vice President/ Directors are shadowed to denote corporate reporting positions. Dotted lines represent matrixed relationships for site related communication and administrative purposes.

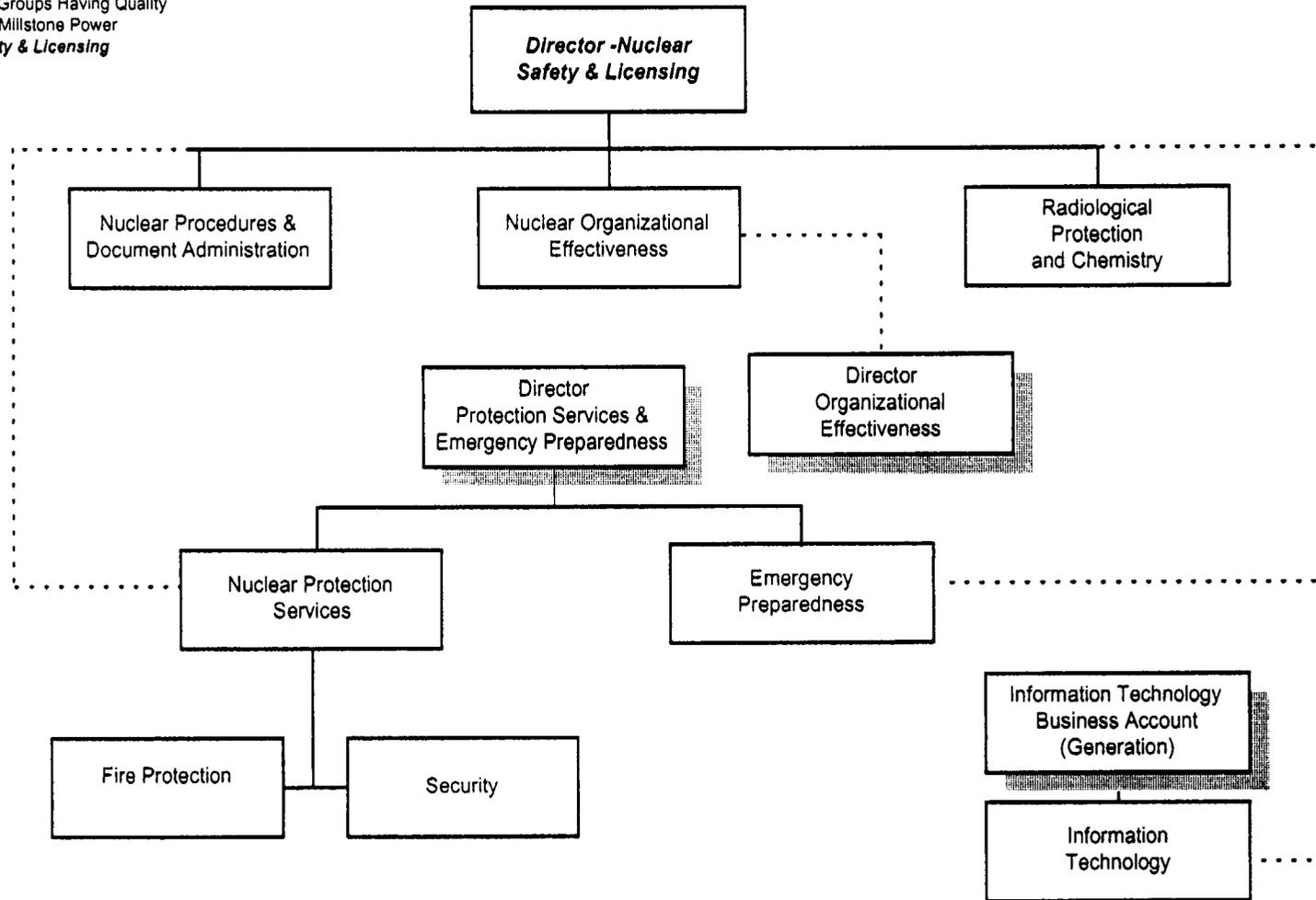
Organizational Relationship
of Functional Groups Having Quality
Functions for Millstone
Power Station



Organizational Relationship
of Functional Groups Having Quality
Functions for Millstone Power
Station - Nuclear Operations & Maintenance



Organizational Relationship
of Functional Groups Having Quality
Functions for Millstone Power
Station - *Safety & Licensing*



2.0 QUALITY ASSURANCE PROGRAM

2.1 GENERAL REQUIREMENTS

The licensee has established a Quality Assurance Program (QAP) for the Millstone Power Station which complies with the criteria of 10CFR50, Appendix B, and follows the regulatory documents and their endorsed ANSI/IEEE standards identified in Appendix C with exceptions as identified in Appendix E. The quality assurance requirements set forth in the attached Policy Statement, supplemented by quality assurance procedures, provide the primary basis of this program and the licensee's policy with regard to quality assurance for the Millstone Power Station nuclear units. This QAP Topical Report is established to accomplish the required level of quality in activities carried out throughout the life of the Station's operating nuclear power plants and the decommissioning of Unit 1.

This QAP applies in its entirety to all activities affecting the safety-related functions of structures, systems and components of the Millstone Power Station nuclear units. Safety-Related structures, systems and components for Millstone Units 2 and 3 are functionally identified in Appendix A of this QAP and are designated Category I by the licensee. Applicability of Appendix A to each FSAR is addressed by existing Nuclear Unit specific Design Bases and Licensing commitments, and also as specifically identified in each FSAR addressing Section 3.2.1 of Regulatory Guide 1.70. Millstone Unit 1 Safety-related structures, systems and components are defined in the DSAR. This QAP is also applicable in its entirety to materials, equipment, parts, consumables and services designated Category I.

This QAP applies to other quality programs including Anticipated Transient Without Scram (ATWS) Quality Assurance, which is applicable to MP-2 only (MP-3 commits to Generic Letter 85-06), and to Electrical Equipment Qualification (EEQ), as defined by licensee commitments. Portions of this QAP are also applicable to Fire Protection Quality Assurance (FPQA), Station Blackout Quality Assurance (SBOQA) and Radwaste Quality Assurance (RWQA) which are delineated in applicable procedures.

The Materials, Equipment, and Parts List (MEPL) Program provides instructions to identify structures, systems, components, materials, equipment, parts, consumables, quality software and activities that need to be identified as safety-related or augmented quality. For quality software, the Software Quality Assurance (SQA) Program provides instructions to classify software and describe the appropriate level of documentation that is warranted for software used to support those functions of structures, systems, and components that are affected by the QAP.

The requirements of this QAP are implemented by the licensee which operates Millstone Power Station, and their vendors performing activities affecting quality structures, systems, and components of the Station's nuclear power plants.

Procedures define the required indoctrination and training of personnel performing activities affecting quality, as necessary, to assure that suitable proficiency is achieved and maintained.

Training sessions are documented. The content of the training sessions is described, attendees and attendance date indicated, and the results (e.g., examination results) of the training sessions recorded, as applicable.

Periodic program review of the status and adequacy of this QAP is accomplished by Nuclear Oversight audits, surveillances and inspections, by **offsite review committee** reviews, and by the independent review team which performs the biennial Management Quality Assurance Review described herein and in QAP 1.0, "Organization", Section 1.5. Organizations outside the licensee are required to review the status and adequacy of that part of this QAP for which they have been delegated responsibility.

2.2 IMPLEMENTATION

2.2.1 GOALS AND OBJECTIVES

The goals of this QAP are to maintain quality levels in an effective and efficient manner and to assure a high degree of functional integrity and reliability of Station nuclear power plant quality structures, systems, and components. To meet these goals, the following objectives of this QAP have been defined:

- a. Define, through procedures, the quality activities that apply to design, fabrication, procurement, construction, testing, operation, refueling, repair, maintenance and modification of the Station nuclear power plants;
- b. Establish, assign, and document the responsibilities for the conduct of those activities affecting quality structures, systems, and components;
- c. Establish confidence that (a) quality activities for the Station nuclear power plants are performed consistent with the licensee's policies and (b) quality activities are performed by qualified personnel, and are verified through a system of audits, surveillances, and inspections of those organizations with quality responsibilities;
- d. Apprise the Site Vice President - Millstone and the Senior Vice President - Nuclear Operations & Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. of unresolved problems and trends which could have a significant effect on nuclear power plant safety.

2.2.2 PROGRAM DOCUMENTATION

This QAP defines the licensee's nuclear policies, goals, and objectives, and is used as guidance for the development of the various division, department, branch, or section procedures. Revisions to this QAP shall be made as needed to reflect current requirements and descriptions of

activities prior to implementation. These revisions shall be made in accordance with a licensee Procedure.

Revisions to this QAP, which reduce commitments previously accepted by the NRC, are submitted to the NRC for review and approval prior to implementation.

Revisions which do not reduce previously accepted commitments are periodically submitted to the NRC as required by 10 CFR 50.54 (a)(3); 10 CFR 50.55 (f)(3); and 10 CFR 50.71(e) and (f).

Quality procedures are developed by the departments performing quality activities. These procedures are reviewed for concurrence by the departments which are responsible for implementing portions of these procedures and are approved by the initiating department. Nuclear Oversight reviews other department quality procedures for compliance with this QAP and concurs with such procedures as described in QAP 5.0, "Procedures, Instructions and Drawings". Changes to procedures are subjected to the same degree of control as that utilized in the preparation of the original document.

Each Vice President and Director is responsible for implementation of this QAP within their organization which includes individual departmental procedure requirements applicable only to their respective activities. In addition, they are responsible for the preparation, approval, and distribution of those instructions, operating procedures, testing procedures, or other instructions where further guidance is necessary.

2.2.3 STRUCTURES, SYSTEMS AND COMPONENTS

This QAP applies to all activities affecting the safety-related functions of the structures, systems and components as addressed in the Safety Analysis Reports (SARs). Safety-Related structures, systems, and components are functionally identified in Appendix A for Units 2 and 3 and also as specifically identified in each FSAR addressing Section 3.2.1 of NRC Regulatory Guide 1.70. Unit 1 Safety-Related structures, systems, and components are defined in the DSAR.

For structures, systems and components covered by the ASME Code, the licensee's procedures describe the measures taken to assure that the quality assurance requirements contained in the code are supplemented by the specific guidance of the applicable regulatory guides and endorsed ANSI standards listed in Appendix C.

For structures, systems and components, regulatory commitments and the licensee's procedures describe the measures taken to assure that the quality assurance requirements are met.

The degree of control over activities affecting quality structures, systems, 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 QAP provides controls over special processes and skills necessary to attain the required quality, and the need for verification of quality by inspection and test.

Nuclear Oversight and applicable licensee technical organizations jointly determine and identify the extent quality assurance controls are applied to quality structures, systems, and components. The quality assurance controls are in conformance with this QAP, which complies with the 18 criteria set forth in Appendix B to 10 CFR 50.

2.2.4 PARTICIPATING ORGANIZATIONS

The organization for Millstone Power Station activities affecting the quality of structures, systems, and components is identified in QAP 1.0, "Organization", which also briefly describes assigned responsibilities.

Nuclear Oversight is responsible for: a) the development, coordination, and administrative control of this QAP including coordination of Nuclear Oversight procedure review and approval; b) assuring issuance of this QAP Topical Report as a controlled document (as described in QAP 6.0, "Document Control", and; c) the review and concurrence with quality procedures and revisions written by other departments. Procedure reviews shall be performed in accordance with QAP 5.0, "Procedures, Instructions, and Drawings".

The licensee requires that its approved vendors performing quality activities invoke upon their subvendors, via purchase orders/contracts, requirements for a quality assurance program to meet the applicable criteria of Appendix B to 10 CFR 50, including the applicable elements of the regulatory guides and their endorsed ANSI/IEEE standards identified in Appendix C. However, the licensee retains overall responsibility for the Millstone Power Station Quality Assurance Program. The specific quality activities performed by these organizations are specified in the procurement documents. Supply Chain Management (SCM) is responsible for the review and approval of these vendors' quality assurance programs prior to initiation of contracted activities.

The object of the review is to verify that these vendors have an adequate quality assurance program to meet applicable requirements of 10 CFR 50, Appendix B.

In addition to the initial review, Supply Chain Management (SCM) is responsible for the subsequent performance, as appropriate, of audits, surveillances, and inspections of approved vendor's quality assurance programs to assure continued implementation of quality requirements.

Supply Chain Management (SCM) assures that the quality assurance programs of vendors that perform quality activities are periodically reviewed to assure that the vendors are implementing adequate programs. Evaluation, review, and monitoring of vendor quality programs is conducted in accordance with section QAP 7.0, "Control of Purchased Material, Equipment and Services".

Vendors may be delegated the execution of quality assurance functions by Contract. These Contracts are reviewed and approved in accordance with this QAP. These vendors may be contracted to perform quality activities under their approved quality assurance program or directly under the requirements of this QAP.

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 that compliance to these documents is mandatory. Each Department is responsible for assuring assigned personnel who perform quality activities have been appropriately indoctrinated and trained.

Nuclear training programs shall be developed and implemented to provide training for all individuals attached to or associated with the Station nuclear power plants. Additional guidance is established in the licensee's procedures.

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, date of attendance; and results (e.g., examination results), as applicable.
- b. Proficiency of personnel performing and verifying activities affecting quality is established and maintained. Personnel proficiency is established and maintained by training, examination/testing, and/or certification based upon the requirements of the activity. Acceptance criteria are developed to determine if individuals are properly trained and qualified;
- c. Certificates or other documentation of qualification clearly delineate the specific functions personnel are qualified to perform and the criteria used to qualify personnel in each function.

This program also requires the head of each department to be responsible for a training plan which assures that personnel performing quality activities are trained in the principles and techniques of the activity being performed.

2.2.6 MANAGEMENT PARTICIPATION

Millstone Power Station Vice President and Directors are responsible for implementing this QAP within their organization. The Manager - Nuclear Oversight will assist in development, coordination, and review of the program.

The Senior Vice President - Nuclear Operations & Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. assures that a management review of this QAP is conducted on an annual basis by an independent team to assess the scope, status, implementation, and effectiveness, and to assure compliance with NRC licensing commitments. Senior Vice President - Nuclear Operations & Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. has delegated the responsibility for the management review to the Manager - Nuclear Oversight.

Actions considered by the Management Quality Assurance Review may include, but are not limited to:

- a. Review of selected procedures and documents;
- b. Verification of the implementation of selected procedural requirements;
- c. Review of past audit results and other inspection/review results such as those from previous Management Quality Assurance Reviews, the NRC or other departments.

The Management Quality Assurance Review's findings of deficiencies and recommendations for program improvement are forwarded to the Senior Vice President - Nuclear Operations & Chief Nuclear Officer - Dominion Nuclear Connecticut, Inc. who shall assure appropriate corrective action is taken.

3.0 DESIGN CONTROL

3.1 GENERAL REQUIREMENTS

This QAP provides measures to assure that the applicable design requirements, such as design bases, regulatory requirements, codes, technical standards and quality standards, are identified in design documents which are reviewed, approved and controlled in accordance with procedures. Such measures include review for suitability of application of materials, equipment, parts and processes that are essential to the functions of quality structures, systems, and components. Changes to, and deviations from, specified requirements are identified, documented and controlled.

Nuclear Engineering is responsible for controlling design work, administering design control activities (including design interface) and design modifications for quality structures, systems, and components.

The responsibility for administration of the design control program for the Millstone Power Station nuclear power plants rests with Nuclear Engineering. The division of responsibilities and jurisdictional boundaries for design control program implementation are set forth in licensee procedures. Although other organizations may be delegated the task of establishing and executing the design control program or any part thereof, Nuclear Engineering shall retain overall responsibility for the program. The applicable requirements of this QAP shall be imposed on other organizations delegated the task of establishing or executing the design control program in accordance with QAP 4.0, "Procurement Document Control" and QAP 7.0, "Control of Purchased Material, Equipment and Services".

The interface controls, both internal and external, for organizations performing design work for quality structures, systems, and components are identified and implemented in accordance with procedures. This identification includes those organizations providing criteria, designs, specifications and technical direction.

Measures are applied to verify the adequacy of design. The extent of design verification is specified and documented by the responsible organization. The individuals performing design verification should not (1) have immediate supervisory responsibility for the individual performing the design, (2) have specified a singular design approach, (3) have ruled out certain design considerations, or (4) have established the design inputs for the particular design aspect being verified. The independent design verification should not dilute or replace the responsibility of the supervisors for the quality of work performed under their supervision. Where changes to previously verified designs have been made, design verifications are required for the change, including evaluation of the effects of those changes on the overall design. Design verification may be accomplished by testing. Tests to demonstrate adequacy under adverse design conditions shall comply with the requirements of QAP 11.0, "Test Control." Design errors and deficiencies which adversely affect quality structures, systems, and components in the 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, "Nonconforming Material, Parts, Components, or Services" and/or QAP 16.0, "Corrective Action".

3.2 IMPLEMENTATION

Nuclear Engineering is responsible for the design, design review, engineering approval of design changes, design evaluation and design control for the units. Although some portion of the design process may be delegated to other organizations, Nuclear Engineering has the responsibility for overall design and final engineering decisions and design control of quality structures, systems, and components.

Nuclear Oversight performs audits, surveillances, and inspections, as appropriate, to verify that licensee processes are effectively complying with this QAP and procedural requirements for design control. Additionally, audits, surveillances and inspections are performed, as appropriate, to verify that vendors are effectively complying with their quality assurance program requirements for design control.

3.2.1 DESIGN PROCESS

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, "Document Control".

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. Procedures and instructions further require that appropriate quality standards are specified and included in design documents. Materials, equipment, parts and processes, including standard "off the shelf" commercial or previously approved items essential to 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.

Procedures assure that a documented check is performed to verify the accuracy and completeness of design drawings and specifications before release for procurement, fabrication or construction. Design drawings receive a documented check to verify dimensional accuracy.

Design drawings and specifications issued for design changes are reviewed for completeness and accuracy before release to operations, in accordance with design control procedures.

Procedures describe the provisions to assure that design drawings and specifications are prepared, reviewed and approved in accordance with licensee requirements and that the documents contain the necessary quality assurance requirements, such as inspections and test requirements, acceptance requirements, and the extent of documenting inspection and test results.

3.2.2 DESIGN CHANGE CONTROL

Procedures and instructions governing design change control during modifications to the Station nuclear plants, the control of discrepant or deficient design conditions, and the reporting of unsatisfactory performance provide for the identification of the need for design changes and a documented method to control these changes. Design and specification changes are subject to design control measures commensurate with those applied during the original design as amended by applicable design or licensing basis changes.

An independent review and approval of design changes is performed by the organization that conducted the original design reviews, unless such review is performed by the licensee or another qualified organization delegated by the licensee to perform this function.

Proposed design change modifications are submitted to the appropriate Nuclear Engineering management for processing and review. This review includes the appropriate on-site review committee(s) as required by applicable procedures. If the change involves a quality structure, system or component, the change shall be reviewed by qualified engineering personnel for technical adequacy. Reviews of the 10CFR50.59 evaluations associated with proposed design changes are performed by the **offsite review committee**. The sequence of the **offsite review committee** review depends upon the determination of whether a license amendment (for Unit 1, also an unreviewed decommissioning question), is involved (i.e., in accordance with ANSI N18.7, if a proposed change in the facility requires a license amendment then the **offsite review committee** review is conducted prior to submittal of the proposed change to the NRC for review and the issuance of a license amendment for its implementation).

The combination of these independent reviews by the on-site review committee(s) and **the offsite review committee** is performed to assure that:

- a. the adequacy of the proposed change is substantiated;
- b. changes that require a license amendment are properly identified and handled per 10CFR50.59; (for Unit 1, unreviewed decommissioning questions are properly identified and handled per 10CFR50.82);

- c. nuclear safety requirements have been addressed.

Errors and deficiencies in design, including the design process, that could adversely affect quality structures, systems, and components are documented and corrective action is taken in accordance with QAP 15.0, "Nonconforming Materials, Parts, Components, or Services" and/or QAP 16.0, "Corrective Action".

Notification of design changes are transmitted to responsible plant personnel prior to implementation and as part of the design change package close out. Procedures describe this notification which assures that personnel are made aware of design change modifications which may affect the performance of their duties.

3.2.3 DESIGN INTERFACE CONTROL

Procedures and instructions identify design interface controls and the resolution of design interface questions during modifications to the station nuclear power plants.

3.2.4 INDEPENDENT DESIGN VERIFICATION

Original designs and design modifications are reviewed for adequacy and the sign-off performed by a person other than the originator of the design. The originator's supervisor may perform this independent review only if the supervisor: (1) did not specify a singular design approach, (2) did not establish the design inputs or rule out certain design considerations, (3) is the only individual in the organization competent to perform the review. Where the supervisor performs the design review, the next level of management shall fulfill the supervisor's responsibilities. Design verification is documented in accordance with procedures or instructions. Simplified calculations or computer programs may be utilized as alternate means of design verification. When design verification is performed by testing, the tests are performed using procedures, which specify the authority and responsibility of design verification personnel. Responsibility for design adequacy and evaluation is retained by Nuclear Engineering.

Design verification (if other than by qualification testing) is normally completed prior to release for procurement, fabrication, and construction, or release to another organization for use in other design activities. For those cases where design verification cannot be completed prior to release for procurement, fabrication, and construction, procedures assure that design verification is completed prior to the point when the installation is declared operational.

Procedures describe the requirements which assure the following when testing is considered as an alternate method of design verification:

- a. Specifications or procedures provide criteria that specify when verification should be by test.
- b. Prototype, component or feature testing is performed as early as possible prior to installation of plant equipment, or prior to the point when the installation is declared operational.
- c. Verification by test performed under conditions that simulate the most adverse conditions as determined by analysis.

Particular emphasis is placed on assuring that designs are in conformance with applicable codes, and on selecting the proper design verification or checking method. Procedures and instructions provide the requirements and necessary controls for design verification. These controls include a review to assure that design characteristics can be controlled, verification that there is adequate accessibility for inspection or test, and that inspection and test acceptance criteria are incorporated. Documentation of reviews is provided.

Procedures include requirements which identify the responsibility of design verifiers, the areas and features to be verified, and the extent of the documentation.

Procedures assure that procedural control is established for design documents that reflect the commitments of the nuclear unit FSAR/DSAR. These procedural controls vary for design documents which receive formal design verification by several disciplines or organizations, and those which can be reviewed by a single individual. The specific design documents and specialized reviews are determined and used as required by the design changes and modifications.

Procedures are established to assure that verified computer programs are certified for a specific use.

The licensee is responsible for assuring that the design documents generated by vendors for the Station nuclear power plants are technically correct, approved, and maintained.

APPENDIX F
QUALITY ASSURANCE PROGRAM (QAP)
TOPICAL REPORT - MILLSTONE POWER STATION

ADMINISTRATIVE CONTROLS¹

NOTE:

1. "Technical Specification" numbers refer to the unit specific Technical Specifications as identified.

INDEPENDENT SAFETY ENGINEERING GROUP (ISEG)

Function

The ISEG shall function to advise Senior Vice President - Nuclear Operations and the Site Vice President - Millstone on matters related to nuclear safety. The ISEG shall include, as part of its function, examination of unit operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources of unit design and operating experience information, including units of similar design, which may indicate areas for improving unit safety. The ISEG shall make detailed recommendations for revised procedures, equipment modifications, maintenance activities, operations activities, or other means of improving unit safety to appropriate station/corporation management.

The ISEG reports to management who is not in the direct chain of command for power production. This relationship provides for access to a high-level, technically oriented, management position such that the required authority and organizational freedom to perform assessment is not influenced by cost and schedule when opposed to nuclear safety considerations. The ISEG is directly involved in meeting the requirements of NUREG-0737 for item I.B.1.2 for Millstone Units 2 and 3. The ISEG is independent of the SORC and the *MSRC*.

Composition

The ISEG shall be composed of at least five full-time personnel located on site to perform the functions described above for Millstone Units 2 and 3. Each person shall have either:

- (1) A bachelor's degree in engineering or related science and at least 2 years of professional level experience in his field, at least 1 year of which experience shall be in the nuclear field, or,
- (2) At least 10 years of professional level experience in his field, at least 5 years of which experience shall be in the nuclear field.

A minimum of 50% of these personnel shall have the qualifications specified in (1) above.

¹ Relocation of Technical Specification Administrative Controls Related to Quality Assurance in Response to AL 95-06.

Responsibilities

The ISEG shall be responsible for maintaining surveillance of unit activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

Records

Records of activities performed by the ISEG shall be prepared and maintained, and quarterly reports of completed evaluations will be made to the SVP/CNO - Dominion Nuclear Connecticut, Inc., the Senior Vice President - Nuclear Operations, and the Site Vice President - Millstone.

*Not responsible for sign-off function

REVIEW AND AUDIT

Site Operations Review Committee (SORC)

Function

The SORC shall function to advise the Site Vice President - Millstone on all matters related to nuclear safety for Millstone Power Station. The Site Vice President - Millstone shall advise the SVP/CNO - Dominion Nuclear Connecticut, Inc. and Senior Vice President - Nuclear Operations on all matters related to nuclear safety requiring higher level of responsibility and authority.

Composition

The SORC shall be composed of a minimum of eleven members. Members shall collectively have experience and expertise in the following areas:

- Plant Operations
- Engineering
- Reactor Engineering
- Maintenance
- Instrumentation and Controls
- Radiation Protection
- Chemistry
- Work Planning
- Quality Assurance

Each SORC member shall meet the following minimum qualifications:

- 1) Have an academic degree in an engineering or physical science field, and have a minimum of five years technical experience in their respective field of expertise,
or
- 2) Hold a management position, and have a minimum of five years technical experience in their respective field of expertise.

The members of SORC shall be appointed in writing by the Site Vice President - Millstone. The SORC Chairperson and two Vice Chairpersons shall be drawn from the members and shall be appointed in writing by the Site Vice President - Millstone.

Alternates

Alternate members shall be appointed in writing by the SORC Chairperson to serve on a temporary basis. Each alternate shall meet the minimum qualifications described above for SORC members, and shall have the same area of expertise as the member being replaced.

Meeting Frequency

The SORC shall meet at least once per calendar month and as convened by the SORC Chairperson.

Quorum

A quorum of the SORC shall consist of the Chairperson or Vice Chairperson and five members or designated alternates. However, no more than two alternates may vote at any one time.

For any SORC decision affecting site-wide issues, the Chairperson shall ensure appropriate representation.

Responsibilities

The SORC shall be responsible for:

- a. Review of 1) all procedures required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.5 and changes thereto, 2) all programs required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.6 and changes thereto, 3) any other proposed procedures, programs, or changes thereto as determined by the SVP/CNO - Dominion Nuclear Connecticut, Inc., Senior Vice President - Nuclear Operations, or Site Vice President - Millstone to affect site nuclear safety. Programs and procedures required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.5 and 5.6 that are designated for review and approval by the Station Qualified Reviewer Program do not require SORC review.
- b. Review of all proposed changes to Technical Specifications.
- c. Review of all proposed tests and experiments that affect nuclear safety.
- d. Review of all proposed changes or modifications to systems or equipment that affect nuclear safety.
- e. Render determinations in writing or meeting minutes if any item considered under (a) through (d) above, as appropriate and as provided by 10CFR50.59 or 10CFR50.92, requires a license amendment or requires a significant hazards consideration determination.
- f. Performance of special reviews and investigations and reports as requested by the Chairperson of **Management Safety Review Committee**.
- g. Review of the fire protection program and implementing procedures.

- h. Investigations of all violations of Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Site Vice President - Millstone, SVP/CNO - Dominion Nuclear Connecticut, Inc., Senior Vice President - Nuclear Operations, and to the Chairperson of the **Management Safety Review Committee**;
- i. Review of all Millstone Power Station REPORTABLE EVENTS;
- j. Review of facility operations to detect potential safety hazards;
- k. Review of Unit 3 Turbine Overspeed Protection Maintenance and Testing Program and revisions thereto.

Authority

The SORC shall:

- a. Recommend to the Site Vice President - Millstone written approval or disapproval in meeting minutes of items considered under Responsibilities (a) through (k) above. The Site Vice President - Millstone will report to the Senior Vice President - Nuclear Operations and the SVP/CNO - Dominion Nuclear Connecticut, Inc., any issues that require higher level of authority.
- b. Provide immediate written notification or meeting minutes to the Senior Vice President - Nuclear Operations, the SVP/CNO - Dominion Nuclear Connecticut, Inc. and the Chairperson of the **Management Safety Review Committee** of disagreement between the SORC and the Site Vice President - Millstone; however, the Senior Vice President - Nuclear Operations shall have responsibility for resolution of such disagreements pursuant to Unit 2/3 Technical Specification 6.1.1 and Unit 1 Technical Specification 5.1.1.

Records

The SORC shall maintain written minutes of each meeting and copies shall be provided to the Site Vice President - Millstone, the Senior Vice President - Nuclear Operations and Chairperson of the **Management Safety Review Committee**. Minutes regarding investigations of violations of Tech Specs and disagreements addressed by SORC shall also be provided to the SVP/CNO.

Management Safety Review Committee (MSRC)

Function

The minimum qualifications of **MSRC** members are as follows:

- a. The Chairperson and **MSRC** members shall have:
 - 1. An academic degree in an engineering or physical science field, or hold a senior management position, and
 - 2. A minimum of five years technical experience in their respective field of expertise.
- b. The **MSRC** shall have experience in and shall function to provide independent oversight review and audit of designated activities in the areas of:

1. Nuclear power plant operations;
2. Nuclear engineering;
3. Chemistry and radiochemistry;
4. Metallurgy;
5. Instrumentation and control;
6. Radiological safety;
7. Mechanical and electrical engineering; and
8. Quality assurance practices.

The **MSRC** serves to advise the **Senior Vice President/Chief Nuclear Officer (SVP/CNO)** on matters related to nuclear safety and notify the **SVP/CNO** within 24 hours of a safety significant disagreement between the **MSRC** and the organization or function being reviewed.

Composition

The SVP/CNO shall appoint, in writing, an MSRC Chairperson. The MSRC Chairperson shall appoint, in writing, a minimum of seven members to the MSRC and shall designate from this membership, in writing, a Vice Chairperson.. The membership shall function to provide independent review and audit in the areas listed in Function (b) above.

Alternates

All alternate members shall be appointed, in writing, by **the MSRC Chairperson**; however, no more than two alternates shall participate as members in **MSRC** activities at any one time.

Meeting Frequency

The **MSRC** shall meet at least once per calendar quarter.

Quorum

The quorum of the **MSRC** shall consist of a majority of **MSRC** members including the Chairperson or Vice Chairperson. No more than a minority of the quorum shall have line responsibility for operation of a Dominion Nuclear Connecticut, Inc. nuclear unit. No more than two alternates shall be appointed as members at any meeting in fulfillment of the quorum requirements.

Review Responsibilities

The **MSRC** shall be responsible for the review of:

- a. The evaluations for changes to the facility and procedures, and tests or experiments completed under the provisions of 10 CFR 50.59, to verify that such actions did not require a license amendment as defined in 10 CFR 50.59;

- b. Proposed changes to the facility or procedures that require a license amendment as defined in 10 CFR 50.59;
- c. Proposed tests or experiments that require a license amendment as defined in 10 CFR 50.59;
- d. Proposed changes to Technical Specifications and the Operating License;
- e. Violations of applicable codes, regulations, orders, license requirements, or internal procedures having nuclear safety significance;
- f. All Licensee Event Reports required by 10 CFR 50.73;
- g. Indications of significant unanticipated deficiencies in any aspect of design or operation of structures, systems, or components that could affect nuclear safety;
- h. Significant accidental, unplanned, or uncontrolled radioactive releases, including corrective actions to prevent recurrence;
- i. Significant operating abnormalities or deviations from normal and expected performance of equipment that could affect nuclear safety;
- j. The performance of the corrective action program; and
- k. Audits and audit plans.

Reports or records of these reviews shall be forwarded to the Senior Vice President - Nuclear Operations and the Site Vice President - Millstone within 30 days following completion of the review.

Audit Program Responsibilities

The **MSRC** audit program shall be the responsibility of Nuclear Oversight. **MSRC** audits shall be performed at least once per 24 months in accordance with administrative procedures and shall encompass:

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions;
- b. The training and qualifications of the unit staff;
- c. The implementation of all programs required by Units 2/3 Technical Specification 6.8 and Unit 1 Technical Specification 5.6;
- d. The Fire Protection Program and implementing procedures.
- e. The fire protection equipment and program implementation utilizing either a qualified offsite license fire protection engineer or an outside independent fire protection consultant.
- f. Actions taken to correct deficiencies occurring in equipment, structures, systems, components, or method of operation that affect nuclear safety; and

- g. Other activities and documents as requested by the Site Vice President - Millstone, the Senior Vice President - Nuclear Operations or SVP/CNO - Dominion Nuclear Connecticut, Inc.

Records

Written records of reviews and audits shall be maintained. As a minimum these records shall include:

- a. Results of the activities conducted under the provisions of this **MSRC** Section;
- b. Deleted
- c. Deleted

Station Qualified Reviewer Program

Function

The designated manager, designated officer, Site Vice President - Millstone may establish a Station Qualified Reviewer Program whereby required reviews of designated procedures or classes of procedures required by SORC, Responsibilities item (a) are performed by Station Qualified Reviewers and approved by designated managers. These reviews are in lieu of reviews by the SORC. However, procedures which require a 10 CFR 50.59 evaluation in accordance with the station 50.59 Screen and Evaluation procedure must be reviewed by the SORC.

Responsibilities

The Station Qualified Reviewer Program shall:

- a. Provide for the review of designated procedures, programs, and changes thereto by a Qualified Reviewer(s) other than the individual who prepared the procedure, program, or change.
- b. Ensure cross-disciplinary review of procedures, programs, and changes thereto when organizations other than the preparing organization are affected by the procedure, program, or change. These are performed by the affected disciplines, or by other persons designated by cognizant manager or director as having specific expertise required to assess a particular procedure, program, or change. Cross-disciplinary reviewers may function as a committee.
- c. Provide for written recommendation by the Qualified Reviewer(s) to the designated manager for approval or disapproval of procedures and programs considered under SORC Responsibilities item (a), and ensure that the procedure or program was screened by a qualified individual and found not to require a 10 CFR 50.59 evaluation.

Personnel recommended to be Station Qualified Reviewers shall be designated in writing by their designated manager or designee. The Manager, Nuclear Procedures and Document Administration, reviews and recommends for approval. The SORC Chairman or designee shall provide final approval. This qualification shall apply to all procedures and programs considered under SORC Responsibilities (a).

Temporary procedure changes shall be made in accordance with Unit 2/3 Technical Specification 6.8.3 and Unit 1 Technical Specification 5.5.5 with the exception that

changes to procedures for which reviews are assigned to Station Qualified Reviewers will be reviewed and approved as described in Responsibilities (a) through (c) above.

Records

The review of procedures and programs performed under the Station Qualified Reviewer Program shall be documented in accordance with administrative procedures.

Training and Qualification

The training and qualification requirements of personnel designated as a Qualified Reviewer in accordance with the Station Qualified Reviewer Program shall be in accordance with administrative procedures. Qualified reviewers shall have:

- a. A Bachelors degree in engineering, related science, or technical discipline, and two years of nuclear power plant experience;

OR

- b. Six years of nuclear power plant experience;

OR

- c. An equivalent combination of education and experience as approved by a Manager or Director.

SAFETY LIMIT VIOLATION - Units 2 and 3

The SVP/CNO - Dominion Nuclear Connecticut, Inc., Senior Vice President - Nuclear Operations, Site Vice President - Millstone, and the Chairperson of the **MSRC** shall be notified within 24 hours in the event a Safety Limit is violated.

The Safety Limit Violation Report shall be submitted to the Commission, the Chairperson of the **MSRC**, SVP/CNO - Dominion Nuclear Connecticut, Inc., the Senior Vice President - Nuclear Operations, and the Site Vice President - Millstone within 14 days of the violations.

RECORD RETENTION - Units 1 and 2

(1) The following records shall be retained for at least five years:

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
- c. **All REPORTABLE EVENTS.**
- d. Records of surveillance activities, inspections, and calibrations required by these technical specifications.
- e. Records of reactor tests and experiments.
- f. Records of changes made to operating procedures.
- g. Records of radioactive shipments.

- h. Records of sealed source leak tests and results.
 - i. Records of annual physical inventory of all sealed source material of record.
- (2) The following records shall be retained for the duration of the facility operating license:
- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
 - b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.
 - c. Records of facility radiation and contamination surveys.
 - d. Records of radiation exposure for all individuals entering radiation control areas.
 - e. Records of gaseous and liquid radioactive material released to the environs.
 - f. Records of transients or operational cycles for those facility components designed for a limited number of transients or cycles.
 - g. Records of training and qualification for current members of the plant staff.
 - h. Records of inservice inspections performed pursuant to the Technical Specifications.
 - i. Records of quality assurance activities required by the QA Manual.
 - j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR Part 50.59.
 - k. Records of meetings of the **MSRC** and the SORC.
 - l. Records of Environmental Qualification (which are covered under the provisions of Technical Specification 6.13. for Unit 2)
 - m. Records of reviews performed for changes made to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODOCM) and the Process Control Program.

RECORD RETENTION - Unit 3 Only

- (1) In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.
- (2) The following records shall be retained for at least five years:
 - a. Records and logs of unit operation covering time interval at each power level;
 - b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety;
 - c. All REPORTABLE EVENTS;

- d. Records of surveillance activities, inspections, and calibrations required by Technical Specifications;
- e. Records of changes made to the procedures required by Technical Specification 6.8.1;
- f. Records of radioactive shipments;
- g. Records of sealed source and fission detector leak tests and results; and
- h. Records of annual physical inventory of all sealed source material of record.

(3) The following records shall be retained for the duration of the unit Operating License:

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report;
- b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;
- c. Records of radiation exposure for all individuals entering radiation control areas;
- d. Records of gaseous and liquid radioactive material released to the environs;
- e. Records of transient or operational cycles for those unit components identified in Technical Specification Table 5.7-1.
- f. Records of reactor tests and experiments;
- g. Records of training and qualification for current members of the unit staff;
- h. Records of inservice inspections performed pursuant to the Technical Specifications;
- i. Records of quality assurance activities required by the Quality Assurance Topical Report not listed in (2) a. through (2) h. above;
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR Part 50.59;
- k. Records of meetings of the **MSRC** and the SORC;
- l. Records of the service lives of all hydraulic and mechanical snubbers required by Technical Specification 3.7.10 including the date at which the service life commences and associated installation and maintenance records;
- m. Records of secondary water sampling and water quality; and
- n. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.

- o. Records of reviews performed for changes made to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMDCM) and the Process Control Program.