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Dominion

Memorandum

NO-02-0014
January 15, 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 5 (Document No. MP-02-OST-BAP01)

Enclosed please find Quality Assurance Program (QAP) Topical Report - Millstone Power Station, Revision 23, Change 5. The purpose of this change is to align the Millstone Nuclear Oversight Department under the Dominion Corporate Nuclear Oversight Director, instead of reporting to the Vice President and Senior Nuclear Executive - Millstone. This change impacts QAP Sections 1.0, 2.0, 18.0 and Appendix F. The Manager- Nuclear Oversight will report directly to the Director - Nuclear Oversight. The change increases "organizational freedom and independence from cost and schedule when opposed to safety considerations" and therefore complies with 10CFR50.54(a)(3)(vi) and 10CFR50 Appendix B requirements. The change affects only the reporting relationship, the Manager - Nuclear Oversight maintains roles and responsibilities identified in the QAP.

Please note that the effective date of Revision 23, Change 5, is **January 17, 2002**. Please replace the entire contents of QAP 1.0, 2.0 18.0; and Appendix F with the enclosed sections. If you have any questions, contact D. Bruce at X3185.

Attachments: Summary of Changes for Rev. 23, Change 5

Enclosure:

Quality Assurance Program Topical Report - Millstone Power Station, Revision 23, Change 5

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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 Vice President and Senior Nuclear Executive - Millstone

The Vice President and Senior Nuclear Executive - 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 Vice President and Senior Nuclear Executive - Millstone has overall responsibility for engineering, construction, operation, maintenance, modification, quality assurance **and implementation of** this QAP at Millstone Power Station. The following licensing basis positions report directly to the Vice President and Senior Nuclear Executive - Millstone:

- Vice President (VP) - Nuclear Operations/Millstone
- Vice President (VP) - Nuclear Technical Services/Millstone

1.3.2 Vice President (VP) - Nuclear Operations/Millstone

VP - Nuclear Operations/Millstone 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 VP - Nuclear Operations/Millstone 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 VP - Nuclear Operations/Millstone:

- Nuclear Operations & Chemistry
- Maintenance
- Support Services
- Nuclear Training
- Unit 1 Decommissioning Activities

1.3.3 Vice President (VP) - Nuclear Technical Services/Millstone

VP - Nuclear Technical Services/Millstone is responsible for providing engineering services and implementation of this QAP. The following *departments* report directly to the VP - Nuclear Technical Services/Millstone:

- Nuclear Engineering
- Assessment

Nuclear Fuel Engineering reports to the Director, Dominion Nuclear Analysis and Fuel. The Director, Nuclear Engineering is responsible to the VP - Nuclear Technical Services/Millstone.

Supply Chain Management (SCM) reports to the Director, Dominion Supply Chain Management (Generation). The Director, Supply Chain Services is responsible to the VP - Nuclear Technical Services/Millstone.

Information Technology reports to the Director, Dominion Information Technology Business Account (Generation). The Director, Nuclear Engineering is responsible to the VP - Nuclear Technical Services/Millstone.

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 Vice President and Senior Nuclear Executive - 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 Maintenance

Maintenance is responsible for on-line maintenance, cost and scheduling, outage activities, 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 & Chemistry

Nuclear Operations & Chemistry is responsible for operations, nuclear safety, radiological protection and radwaste services, industrial safety, chemistry activities and shift technical advisors. The Director - Nuclear Operations & Chemistry 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), the Director - Nuclear Operations & Chemistry may relieve the Shift Manager of the responsibility of directing the licensed Control Room operators. The following processes report to the Director - Nuclear Operations & Chemistry:

- Unit Operations
- Chemistry
- Operations Support
- Radiological Protection

1.3.6.1 Deputy Director - Nuclear Operations & Chemistry

Deputy Director - Nuclear Operations & Chemistry is responsible for Radiological Protection, Industrial Safety and Chemistry. The Deputy Director is responsible for the safe and efficient implementation of the radiation protection program, the radioactive material handling and shipping program, the chemistry program, and the industrial safety program.

1.3.7 Unit Operations

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

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

Unit 2 Operations is responsible for operations regarding the Unit 1 Spent Fuel Pool Island and auxiliary systems. A Certified Fuel Handler augments the Unit 2 Operations staff to meet Unit operations responsibilities. The transfer of Unit 1 Operations' responsibility to Unit 2 Operations will 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 Manager - Nuclear Operations

The Manager - Nuclear 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, the Manager - Nuclear Operations or the Assistant Manager - Nuclear Operations holds an appropriate license on the Unit (SRO on assigned Unit 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 Manager - Nuclear 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 Manager - Nuclear Operations may relieve the Shift Manager of the responsibility of directing the licensed Control Room operators. The Manager - Nuclear Operations delegates the necessary authority and responsibility for various duties to the Assistant Manager-Nuclear Operations.

1.3.7.2 Shift Managers

The Shift Managers report to the Assistant Manager - Nuclear Operations and are responsible for the Control Room command function. The Shift Manager holds an appropriate license on the unit (SRO for Unit 3 and 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 Radiological Protection

Radiological Protection carries out health physics functions and reports to the Deputy Director, Nuclear Operations & Chemistry to provide sufficient organizational freedom and independence from operating pressures as required by the unit Technical Specifications. The Manager - Radiological Protection fulfills the "Health Physics Manager" position qualifications required by the unit Technical Specifications. Radiological Protection 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
- radiological waste services

1.3.9 Support Services

Support Services is responsible for services in support of the station, including security, project support, fire protection, nuclear records management and procedures.

1.3.10 Nuclear Training

Nuclear Training is responsible for operator and technical training. The operator training group reports directly to the Director - Nuclear Training to provide sufficient organizational freedom and independence from operating pressures as required by the unit Technical Specifications.

1.3.11 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 group is responsible for engineering activities in safety analysis and nuclear fuel, including probabilistic risk assessment, reactor, and radiological engineering.

The Deputy Director - Nuclear Engineering meets all qualification requirements of the Director - Nuclear Engineering to ensure responsibilities can be met during the Director's absence.

Nuclear Fuel Engineering reports to the Director, Dominion Nuclear Analysis and Fuel. The Director, Nuclear Engineering is responsible to the VP - Nuclear Technical Services/Millstone.

1.3.12 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).

1.3.13 Assessment

Assessment includes Emergency Planning and Performance Improvement.

1.3.13.1 Emergency Planning 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 plans.

1.3.13.2 Performance Improvement is responsible for the Corrective Actions Program and Independent Safety Engineering Group and Operating Experience Program.

1.3.14 Information Technology

Information Technology is responsible for the Quality Assurance Software Program. Information Technology reports to the Director, Dominion Information Technology Business Account (Generation). The Director, Nuclear Engineering is responsible to the VP – Nuclear Technical Services/Millstone.

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:

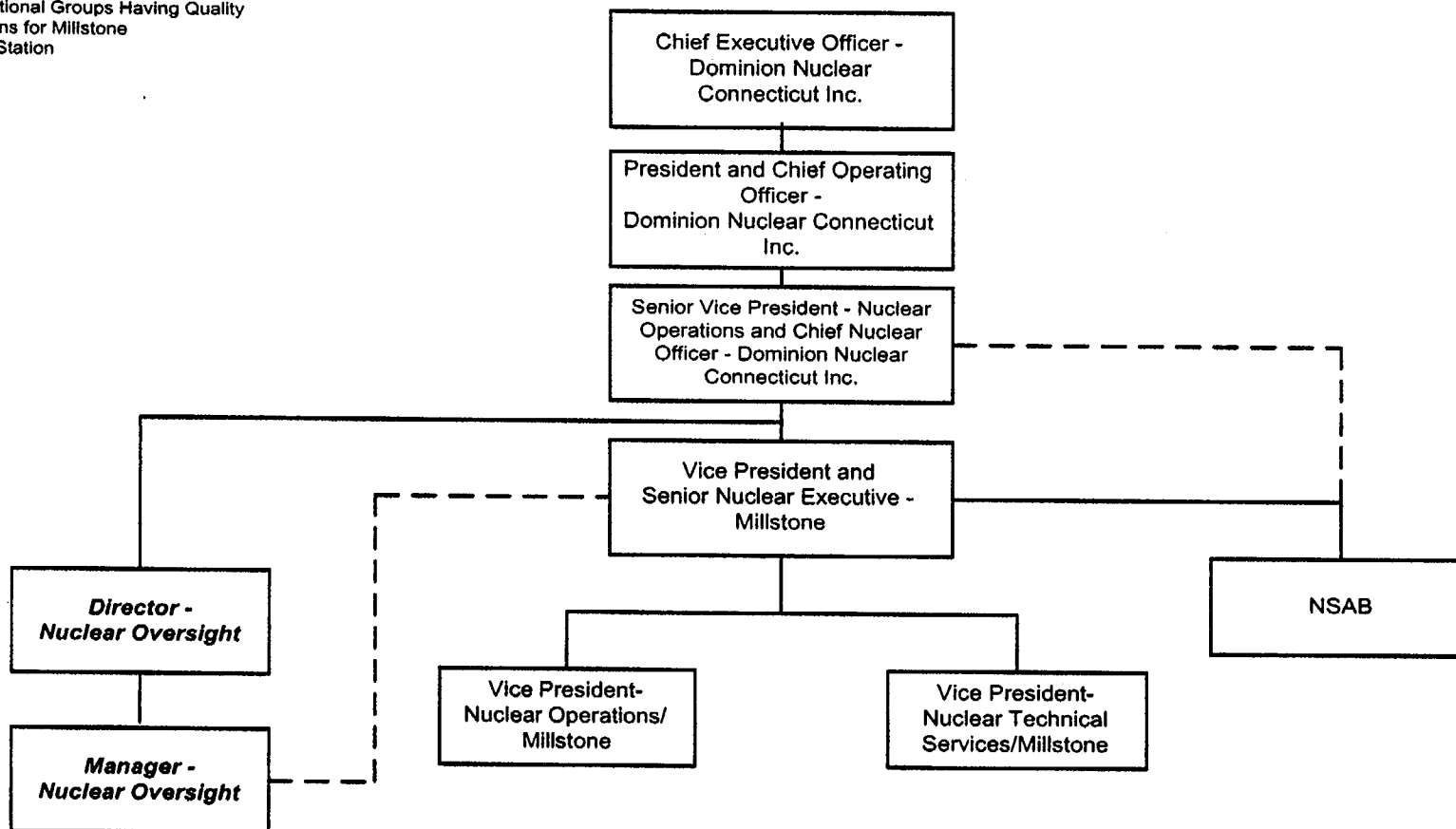
- Vice President - Nuclear Operations/Millstone
- Director - Nuclear Operations & Chemistry
- Licensed Manager - Nuclear Operations or Licensed Assistant Manager - Nuclear Operations designated by Vice President - Nuclear Operations/Millstone
- Shift Manager (SRO)
- Licensed Unit Supervisor (SRO)

1.8 ORGANIZATION CHARTS

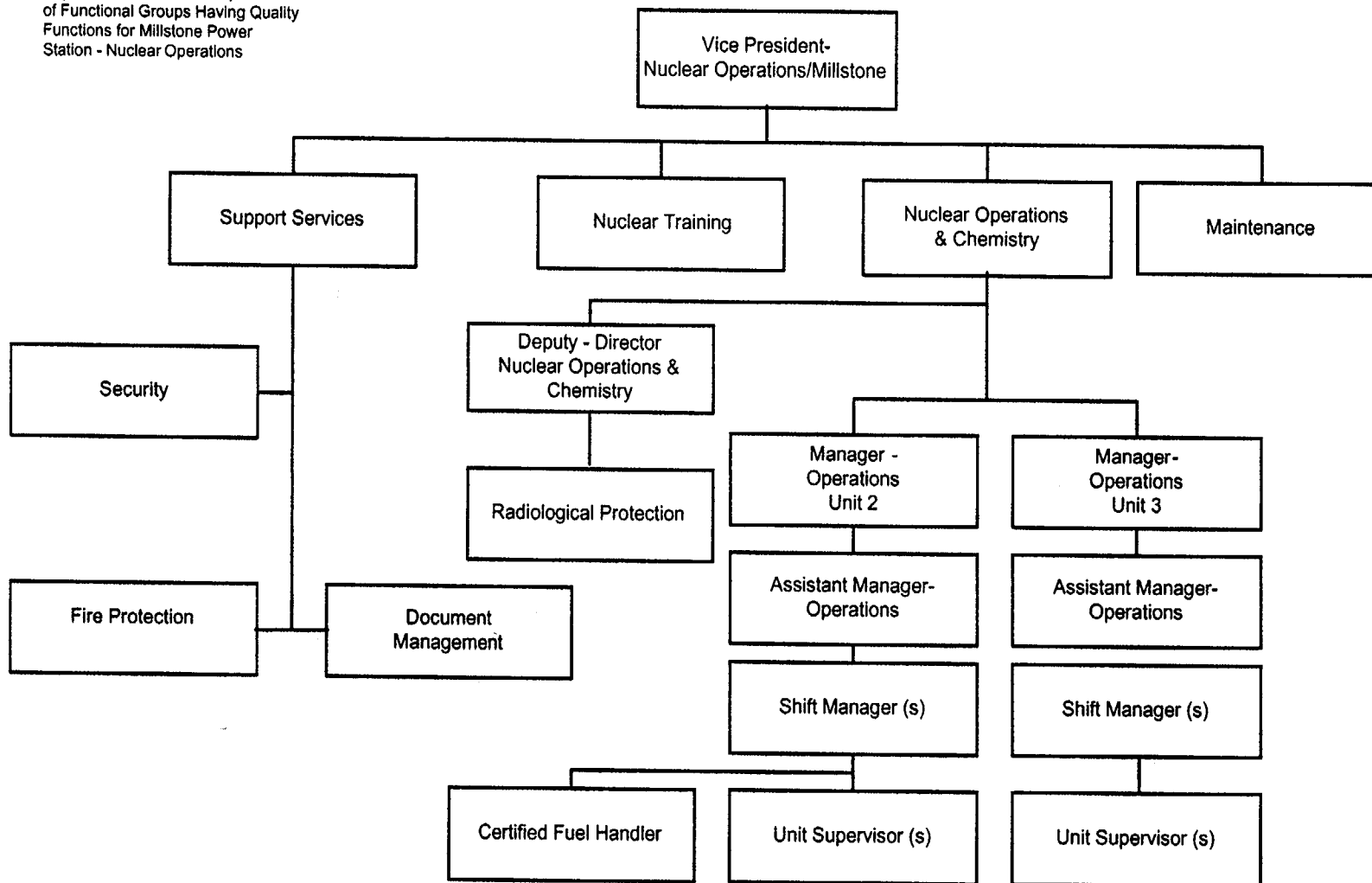
NOTE

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).

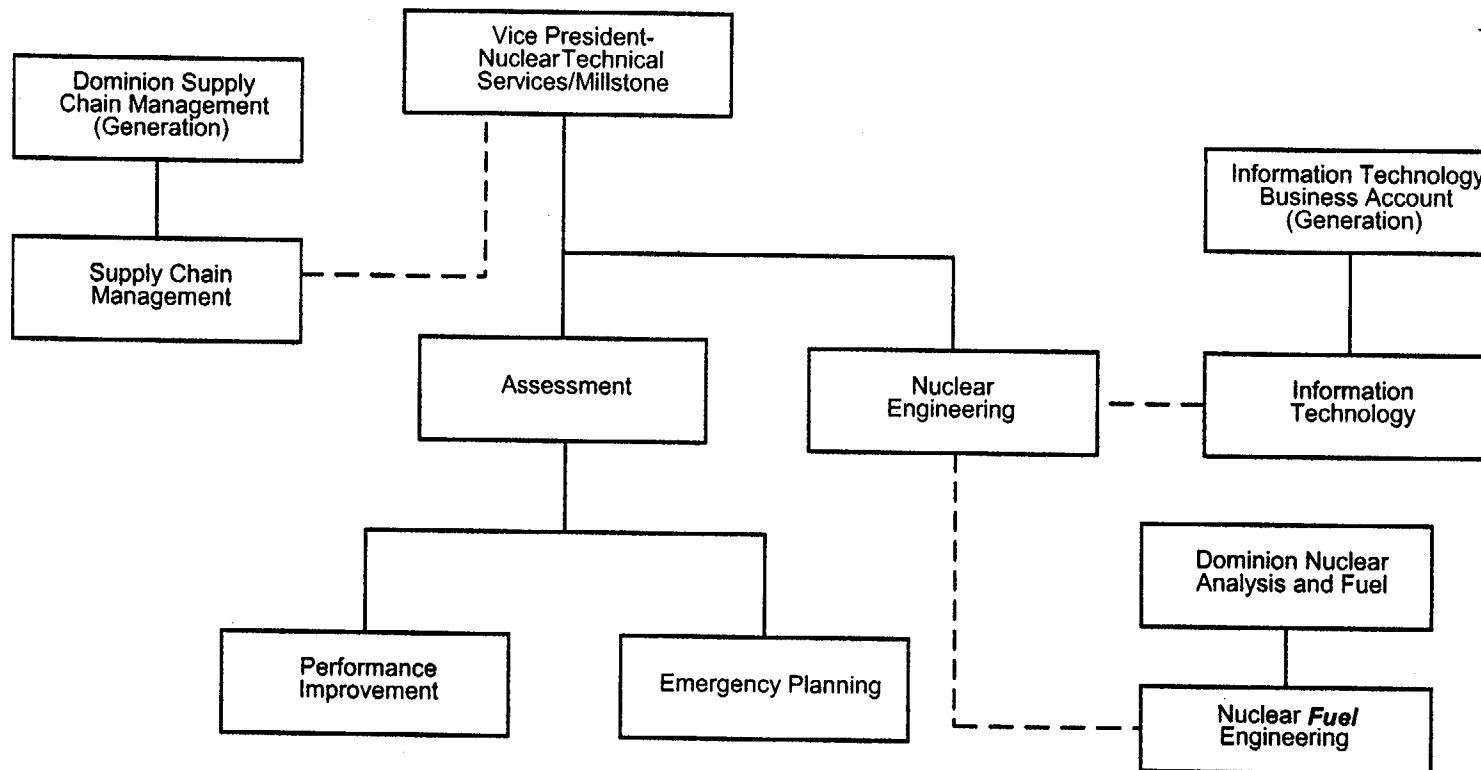
Organizational Relationship
of Functional Groups Having Quality
Functions for Millstone
Power Station



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



Organizational Relationship of Functional Groups
Having Quality Functions for Millstone Power Station -
Nuclear Technical Services



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 Nuclear Safety Assessment Board (NSAB) reviews, and by the independent review team which performs the annual 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 Vice President and Senior Nuclear Executive - 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 Presidents 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.

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 quality activities under the oversight of the Nuclear Safety Assessment Board. 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 licensee 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 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. and the Vice President and Senior Nuclear Executive - 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 which cannot be resolved by affected management are submitted for resolution to the Vice President and Senior Nuclear Executive - Millstone **and the Director - Nuclear Oversight.**

18.2.4 RECORDS/REPORTS OF AUDITS

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

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 the Vice President and Senior Nuclear Executive - 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 NSAB.

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.

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. and the Vice President and Senior Nuclear Executive - Millstone.

*Not responsible for sign-off function

REVIEW AND AUDIT

Site Operations Review Committee (SORC)

Function

The SORC shall function to advise the Director - Nuclear Operations & Chemistry on all matters related to nuclear safety for Millstone Power Station. The Director - Nuclear Operations & Chemistry shall advise the SVP/CNO - Dominion Nuclear Connecticut, Inc. and Vice President and Senior Nuclear Executive - Millstone 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 Director - Nuclear Operations & Chemistry. The SORC Chairperson and two Vice Chairpersons shall be drawn from

the members and shall be appointed in writing by the Director - Nuclear Operations & Chemistry.

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., Vice President and Senior Nuclear Executive - Millstone, or Director - Nuclear Operations & Chemistry 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 the Nuclear Safety Assessment Board.
- 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 Director - Nuclear Operations & Chemistry, SVP/CNO - Dominion Nuclear Connecticut, Inc., Vice President and Senior Nuclear Executive - Millstone, and to the Chairperson of the Nuclear Safety Assessment Board;
- 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 Director - Nuclear Operations & Chemistry written approval or disapproval in meeting minutes of items considered under Responsibilities (a) through (k) above. The Director - Nuclear Operations & Chemistry will report to the Vice President and Senior Nuclear Executive - Millstone 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 Vice President and Senior Nuclear Executive - Millstone, the SVP/CNO - Dominion Nuclear Connecticut, Inc. and the Chairperson of the Nuclear Safety Assessment Board of disagreement between the SORC and the Director - Nuclear Operations & Chemistry; however, the Vice President and Senior Nuclear Executive - Millstone 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 Director - Nuclear Operations & Chemistry, the Vice President and Senior Nuclear Executive - Millstone and Chairperson of the Nuclear Safety Assessment Board. Minutes regarding investigations of violations of Tech Specs and disagreements addressed by SORC shall also be provided to the SVP/CNO - Dominion Nuclear Connecticut, Inc.

Nuclear Safety Assessment Board (NSAB)

Function

The minimum qualifications of NSAB members are as follows:

- a. The Chairperson and NSAB 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 NSAB 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 NSAB serves to advise the Vice President and Senior Nuclear Executive - Millstone on matters related to nuclear safety and notify the SVP/CNO - Dominion Nuclear Connecticut, Inc. and Vice President and Senior Nuclear Executive - Millstone within 24 hours of a safety significant disagreement between the NSAB and the organization or function being reviewed.

Composition

The Vice President and Senior Nuclear Executive - Millstone shall appoint, in writing, a minimum of seven members to the NSAB and shall designate from this membership, in writing, a Chairperson and 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 Vice President and Senior Nuclear Executive - Millstone; however, no more than two alternates shall participate as members in NSAB activities at any one time.

Meeting Frequency

The NSAB shall meet at least once per calendar quarter.

Quorum

The quorum of the NSAB shall consist of a majority of NSAB 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 NSAB 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 Vice President and Senior Nuclear Executive - Millstone within 30 days following completion of the review.

Audit Program Responsibilities

The NSAB audit program shall be the responsibility of Nuclear Oversight. NSAB 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 Vice President and Senior Nuclear Executive - Millstone 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 NSAB Section;
- b. Deleted
- c. Deleted

Station Qualified Reviewer Program

Function

The designated manager, designated officer, or Vice President and Senior Nuclear Executive - 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 [Responsible Individual(s) for the procedure(s)]. These reviews are in lieu of reviews by the SORC. However, procedures which require a 10 CFR 50.59 evaluation 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. Provide for cross-disciplinary review of procedures, programs, and changes thereto when organizations other than the preparing organization are affected by the procedure, program, or change.
- c. Ensure cross-disciplinary reviews are performed by a Qualified Reviewer(s) in 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.
- d. Provide for a screening of designated procedures, programs and changes thereto to determine if an evaluation should be performed in accordance with the provisions of 10 CFR 50.59. This screening will be performed by personnel trained and qualified in performing 10CFR50.59 screenings.
- e. Provide for written recommendation by the Qualified Reviewer(s) to the responsible manager for approval or disapproval of procedures and programs considered under SORC Responsibilities item (a), and that the procedure or program was screened by a qualified individual and found not to require a 10 CFR 50.59 evaluation.

If the responsible manager determines that a new program, procedure, or change thereto requires a 10 CFR 50.59 evaluation, that manager will ensure the required evaluation is performed to determine if the new procedure, program, or change requires a license amendment. The new procedure, program, or change will then be forwarded with the 10 CFR 50.59 evaluation to SORC for review.

Personnel recommended to be Station Qualified Reviewers shall be designated in writing by the designated Director, Manager, Vice President and Senior Nuclear Executive - Millstone, or Vice President – Nuclear Operations/Millstone for each procedure, program, or class of procedure or program within the scope of the Station Qualified Reviewer Program.

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 Qualified Reviewers will be reviewed and approved as described in Responsibilities (a) through (e) 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., Vice President and Senior Nuclear Executive - Millstone and the Chairperson of the NSAB 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 NSAB, SVP/CNO - Dominion Nuclear Connecticut, Inc. and the Vice President and Senior Nuclear Executive - 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 NSAB 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 (REMDCM) 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 NSAB 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.

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