Dominion Nuclear Connecticut, Inc.

Millstone Power Station Rope Ferry Road Waterford, CT 06385



MAY 1 0 2001

Docket Nos. 50-245 50-336 50-423 B18344

RE: 10 CFR 50.54(a)

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Proposed Change to Revision 22 of the
Dominion Nuclear Connecticut, Inc. Quality Assurance Program Topical Report
Independent Safety Engineering Group Reporting Relationship

The purpose of this letter is to request a change in accordance with 10 CFR 50.54(a), to Revision 22 of the Dominion Nuclear Connecticut, Inc. (DNC) Quality Assurance Program (QAP) Topical Report to modify the reporting relationship and clarify the description of the Independent Safety Engineering Group (ISEG) within QAP Section 1.0, "Organization" and QAP Appendix F, "Administrative Controls." The changes involving a reduction in commitment requiring review and approval by the Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.54(a) are:

- Change the ISEG reporting relationship from the Process Owner (PO) -Oversight to the PO - Performance Improvement.
- Revise QAP Appendix F to indicate that ISEG reports to a member of management rather than designating a specific position title.
- Clarify QAP Appendix F by indicating that the ISEG reporting relationship provides for access to a high-level, technically oriented, management position.

Since the proposed changes involve a reduction in commitment to DNC's current quality assurance program, DNC requests NRC review and approval of the proposed changes. Attachment 1 to this letter provides a detailed description of the proposed revisions to the QAP Topical Report and an evaluation of the effects of these changes. Enclosure 1 provides a copy of the proposed changes to QAP Topical Report Section 1.0 and Appendix F. In accordance with 10 CFR 50.54(a), DNC will implement the proposed changes upon approval by the NRC Staff or after 60 days from the date of this letter.

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There are no regulatory commitments contained within this letter.

If you have any questions regarding this submittal, please contact Mr. Paul Willoughby at (860) 447-1791, extension 3655.

Very truly yours,

DOMINION NUCLEAR CONNECTICUT, INC.

Raymond P. Necci - Vice President
Nuclear Technical Services/Millstone

Attachment 1: Proposed Changes to the Dominion Nuclear Connecticut, Inc. Quality Assurance Program, Independent Safety Engineering Group Reporting

Relationship

Enclosure 1: Proposed Changes to Revision 22 of the Dominion Nuclear Connecticut, Inc. Quality Assurance Program Topical Report Section 1.0 and Appendix F

cc: H. J. Miller, Region I Administrator (2 copies)

J. B. Hickman, NRC Project Manager, Millstone Unit No. 1

P. C. Cataldo, Resident Inspector, Millstone Unit No. 2

D. S. Collins, NRC Project Manager, Millstone Unit No. 2

S. R. Jones, Senior Resident Inspector, Millstone Unit No. 2

V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3

A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

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# Attachment 1

Millstone Nuclear Power Station, Unit Nos. 2 and 3

Proposed Changes to the Dominion Nuclear Connecticut, Inc.

Quality Assurance Program

Independent Safety Engineering Group Reporting Relationship

# DESCRIPTION AND EVALUATION OF THE PROPOSED CHANGES

This letter requests changes in accordance with 10 CFR 50.54(a), to Revision 22 of the Dominion Nuclear Connecticut, Inc. (DNC) Quality Assurance Program (QAP) Topical Report to modify the reporting relationship and clarify the description of the Independent Safety Engineering Group (ISEG) within QAP Section 1.0, "Organization" and QAP Appendix F, "Administrative Controls." The changes involving a reduction in commitment requiring review and approval by the Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.54(a) are:

- Change the ISEG reporting relationship from the Process Owner (PO) Oversight to the PO Performance Improvement.
- Revise QAP Appendix F to indicate that ISEG reports to a member of management rather than designating a specific position title.
- Clarify QAP Appendix F by indicating that the ISEG reporting relationship provides for access to a high-level, technically oriented, management position.

These changes clarify the description of the reporting relationship within QAP Appendix F to coincide more closely with the wording within NUREG-0737<sup>(1)</sup> and with a recently received NRC Safety Evaluation<sup>(2)</sup> for Millstone Unit Nos. 2 and 3. QAP Appendix F, Revision 22, second paragraph under Function currently states:

"The ISEG shall report organizationally to a director (or higher) who is not in the direct chain of command of power production. 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 SORC and NSAB."

It is proposed to add a new sentence in Appendix F (before the first paragraph under Function) to clarify the role of ISEG. This sentence does not involve a reduction in commitment but is included for clarity.

"The ISEG shall function to advise the Vice President and Senior Nuclear Executive - Millstone on matters related to nuclear safety."

It is also proposed to revise the second paragraph under Function to state:

"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. ISEG independence is similar to that of the Oversight function."

<sup>(1)</sup> NUREG-0737, "Clarification of TMI Action Plan Requirements," dated November 1980.

<sup>(2)</sup> Millstone Nuclear Power Station, Unit Nos. 2 and 3, "Change to Revision 22 of the NUQAP Topical Report," dated November 13, 2000.

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The proposed wording indicates that the ISEG will report 'to management who is not in the direct chain of command for power production.' The proposed wording also clarifies that this relationship provides for access to a high-level, technically oriented, management position, rather than specifying a precise title, as was the case previously.

Currently the ISEG Team Lead (supervisor) reports to the Process Owner - Oversight (manager). Implementing the proposed changes with the new organizational scheme results in the ISEG reporting to the Process Owner - Performance Improvement, who together with two other Process Owners, i.e., Regulatory Affairs and Emergency Planning, report directly to a high-level, technically oriented, management position, the Vice President - Nuclear Technical Services/Millstone, who reports directly to the Vice President and Senior Nuclear Executive - Millstone. The Vice President - Nuclear Technical Services/Millstone (an Officer) is not in the direct chain of command for power production. Therefore, this reporting relationship provides the ISEG with direct access via their process owner, the PO - Performance Improvement, to the Vice President - Nuclear Technical Services/Millstone.

Also, the ISEG submits reports directly to the Senior Vice President - Nuclear Operations and Chief Nuclear Officer (SVP/CNO) - Dominion Nuclear Connecticut, Inc. and the Vice President and Senior Nuclear Executive - Millstone on a quarterly basis, thereby meeting the intent of NUREG-0737.

The proposed changes will continue to meet the requirements of NUREG-0737, Item I.B.1.2, by providing organizational freedom from the pressures of power production for the assessing organization, i.e., ISEG. The ISEG will report directly to the Process Owner - Performance Improvement, who is responsible only for those processes that improve performance of operations and the line organization. The Vice President - Nuclear Technical Services/Millstone is not responsible for power production.

Dominion Nuclear Connecticut, Inc. has determined that the proposed changes are consistent with the objectives of NUREG-0737. Since the proposed changes involve a reduction in commitment to DNC's current quality assurance program, DNC requests NRC review and approval of the proposed changes.

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# Enclosure 1

Millstone Nuclear Power Station, Unit Nos. 2 and 3

Proposed Changes to Revision 22 of the Dominion Nuclear Connecticut, Inc. Quality Assurance Program Topical Report, Section 1.0 and Appendix F

# 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 and quality assurance including 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
- Process Owner Oversight

# 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 master processes report directly to the VP - Nuclear Operations/Millstone:

- Operate the Asset
- Maintain the Asset
- Support Services
- 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 master processes report directly to the VP - Nuclear Technical Services/Millstone:

- Manage the Asset
- Assessment

Procure the Asset reports to the Director, Dominion Supply Chain Management (Generation), who is responsible to the VP - Nuclear Technical Services/Millstone

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

### 1.3.4 Process Owner - Oversight

Process Owner - Oversight is responsible for the effective performance of Oversight. The Process Owner - 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 Process Owner - Oversight by the SVP/CNO - Dominion Nuclear Connecticut, Inc. The Process Owner - 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

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- 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 Oversight. The Process Owner - 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 Process Owner - 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 Process Owner - 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 Oversight personnel and delineated in an approved procedure.

### 1.3.5 Maintain the Asset

Maintain the Asset 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 Operate the Asset

Operate the Asset is responsible for operations, nuclear safety, chemistry activities and shift technical advisors. The Master Process Owner - Operate the Asset 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 Master Process Owner - Operate the Asset may relieve the Shift Manager of the responsibility of directing the licensed Control Room operators (for Unit 2 or 3), or Central Monitoring Station (CMS) operators (for Unit 1) The following processes report to the Master

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### Process Owner - Operate the Asset:

- Unit Operations
- Chemistry
- Operations Support

# 1.3.7 Unit Operations

The Unit Operations groups report to the Master Process Owner - Operate the Asset Each group includes the following key supervisory positions:

- Process Owner -Operations
- Assistant Manager-Operations
- Shift Manager(s)
- Unit Supervisor(s)

# 1.3.7.1 Process Owner -Operations and Assistant Manager-Operations

The Process Owner - 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 Process Owner - Operations or the Assistant Manager -Operations holds an appropriate license on the Unit (SRO on assigned Unit, 2 or 3, Certified Fuel Handler (CFH) on Unit 1). The Process Owner - 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 on Unit 2 or 3, or CFH on Unit 1), the Process Owner -Operations may relieve the Shift Manager of the responsibility of directing the licensed Control Room (CMS on Unit 1) operators. The Process Owner - Operations delegates the necessary authority and responsibility for various duties to the Assistant Manager-Operations.

### 1.3.7.2 Shift Manager

The Shift Managers report to the Assistant Manager-Operations and are responsible for the Control Room (CMS for Unit 1) command function. The Shift Manager holds an appropriate license on the unit (SRO on Unit 2 or 3, CFH for Unit 1). 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 (CMS for Unit 1).

QAP - 1.0 Rev.22 Chg. Date: DRAFT Page 4 of 12 During accident situations, unless properly relieved, the Shift Manager remains in the Control Room (CMS for Unit 1) 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 on Unit 2 or 3, CFH for Unit 1) and supervises the operators in the Control Room (CMS for Unit 1). The Unit Supervisor directs activities of the licensed Control operators, and may operate the controls of equipment and piping systems from the Control Room (CMS for Unit 1), or alternate station control location.

# 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. For Millstone Unit 1, the Control Operators hold a Certified Fuel Handler or Equipment Operator qualification 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. Unit 1 Control operators test related instruments and controls in the CMS.
- Maintain required logs and calculations, observe these logs for indications of faulty operation, and notify the onduty 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

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# Make minor repairs

# 1.3.8 Support Services

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

### 1.3.9 Radiation Protection and Radwaste Services

Radiation Protection and Radwaste Services carries out health physics functions and reports to Support Services to provide sufficient organizational freedom and independence from operating pressures as required by the unit Technical Specifications. The Process Owner - Radiation Protection and Radwaste Services fulfills the "Health Physics Manager" position qualifications required by the unit Technical Specifications. Radiation Protection and Radwaste Services 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.

# 1.3.10 Training

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

# 1.3.11 Manage the Asset

Manage the Asset 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 Master Process Owner - Manage the Asset meets all qualification requirements of the Master Process Owner - Manage the Asset to ensure responsibilities can be met during the Master Process Owner's absence.

QAP - 1.0 Rev.22 Chg. Date: DRAFT Page 6 of 12 Nuclear Fuels and Safety Analysis reports to the Director, Dominion Nuclear Analysis and Fuel, who is responsible to the VP - Nuclear Technical Services/Millstone.

### 1.3.12 Procure the Asset

Procure the Asset is responsible for procurement. Responsibilities include approval and oversight of vendors that provide quality-related material and services including source and receipt inspection. Procure the Asset reports to the Director, Dominion Supply Chain Management (Generation), who is responsible to the VP – Nuclear Technical Services/Millstone.

### 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), who 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;

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- 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 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.

Master Process Owners and Process Owners carry out responsibilities assigned to Managers and Directors referenced in the unit Technical Specifications.

# 1.5 ANNUAL MANAGEMENT QUALITY ASSURANCE REVIEW

The Vice President and Senior Nuclear Executive - Millstone 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 Vice President and Senior Nuclear Executive - Millstone has delegated the responsibility for the Management Quality Assurance Review to the Process Owner - Oversight.

### 1.6 SPECIFIC QAP RESPONSIBILITIES

The Vice President and Senior Nuclear Executive - Millstone resolves all disputes related to the implementation of the QAP for which resolution is not achieved at lower levels within the organization.

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# 1.7 SUCCESSION OF RESPONSIBILITY FOR OVERALL PLANT OPERATION

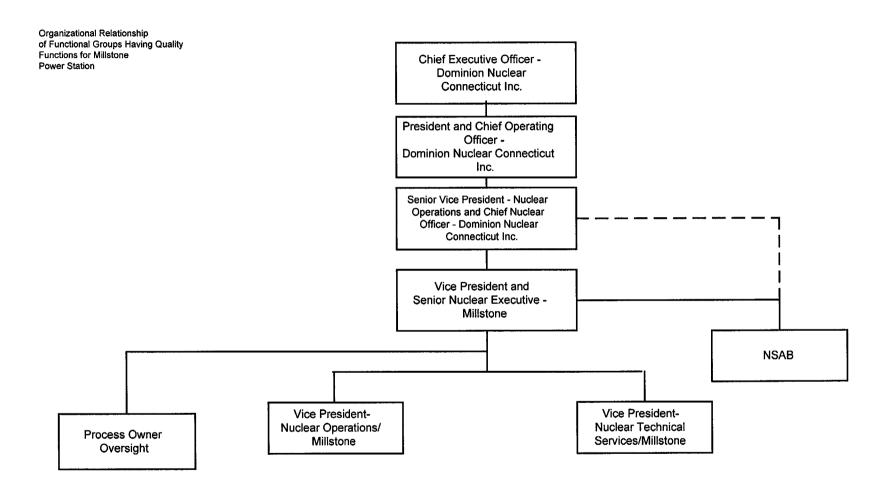
The succession of responsibility for overall plant instructions or special orders, in the event of absences, incapacitation of personnel or other emergencies, is as follows:

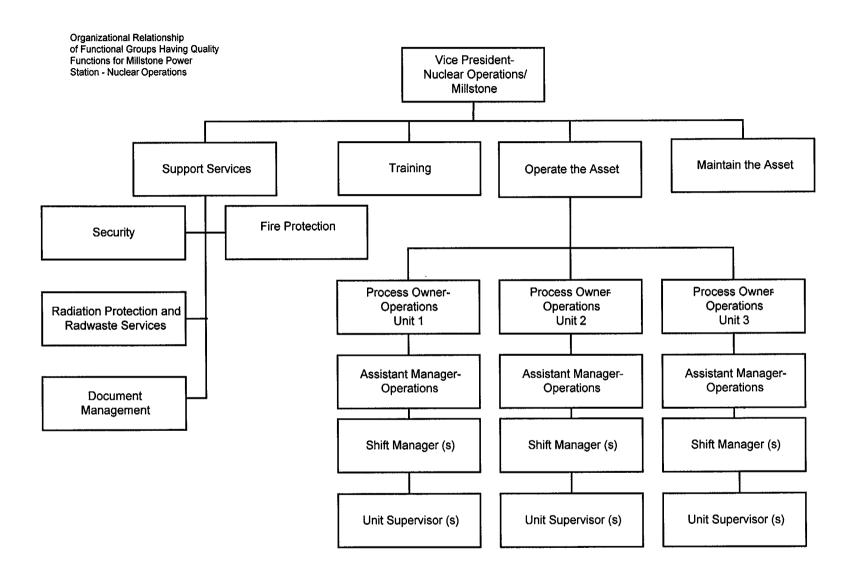
- Vice President Nuclear Operations/Millstone
- Master Process Owner Operate the Asset
- Licensed Process Owner Operations or Licensed Assistant Manager-Operations designated by Vice President - Nuclear Operations/Millstone
- Shift Manager (SRO)
- Licensed Unit Supervisor (SRO)

# 1.8 ORGANIZATION CHARTS

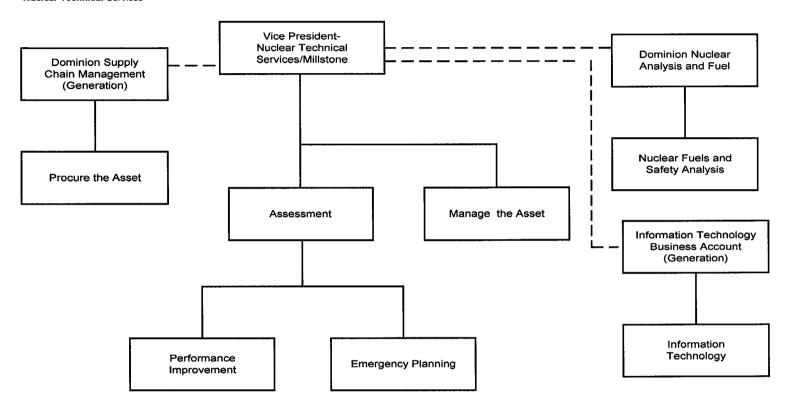
### NOTE

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). effectiveness review in accordance with 10 CFR 50.54 (q).





QAP - 1.0 Figure 1.1 Rev. 22 Chg Date:DRAFT Page 11 of 12



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

### ADMINISTRATIVE CONTROLS<sup>1</sup>

### NOTE:

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

### 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. ISEG independence is similar to that of the Oversight function.

# 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.

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# 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 Master Process Owner - Operate the Asset on all matters related to nuclear safety for Millstone Power Station The Master Process Owner - Operate the Asset 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.

QAP - Appendix F REV. 22 Chg. DATE: DRAFT PAGE: 2 of 11 The members of SORC shall be appointed in writing by the Master Process Owner - Operate the Asset. The SORC Chairperson and two Vice Chairpersons shall be drawn from the members and shall be appointed in writing by the Master Process Owner - Operate the Asset.

### 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 Master Process Owner Operate the Asset 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, constitutes an unreviewed safety question or requires a significant hazards consideration determination.

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- 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 Master Process Owner Operate the Asset, 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 Master Process Owner Operate the Asset written approval or disapproval in meeting minutes of items considered under Responsibilities (a) through (k) above. The Master Process Owner - Operate the Asset 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 Master Process Owner - Operate the Asset; 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 Master Process Owner - Operate the Asset, 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:

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- 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

QAP - Appendix F REV. 22 Chg. DATE: DRAFT PAGE: 5 of 11 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 safety evaluations for changes to procedures, equipment, or systems, and tests or experiments completed under the provisions of 10 CFR 50.59, to verify that such actions did not constitute an unreviewed safety question as defined in 10 CFR 50.59;
- b. Proposed changes to procedures, equipment, or systems that involve an unreviewed safety question as defined in 10 CFR 50.59;
- c. Proposed tests or experiments that involve an unreviewed safety question 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;
- i. 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 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;

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- 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 10CFR50.59 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.

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- c. Ensure cross-disciplinary reviews are performed by a Qualified Reviewer(s) in affected disciplines, or by other persons designated by cognizant Process Owner or Master Process Owner 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 10CFR50.59 to verify that an unreviewed safety question does not exist. This screening will be performed by personnel trained and qualified in performing 10CFR50.59 evaluations.
- e. Provide for written recommendation by the Qualified Reviewer(s) to the responsible manager for for approval or disapproval of procedures and programs considered 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 involves an unreviewed safety question. 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 Master Process Owner, Process Owner, 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

QAP - Appendix F REV. 22 Chg. DATE: DRAFT PAGE: 8 of 11 c. An equivalent combination of education and experience as approved by a Process Owner or Master Process Owner.

### 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 - Unit 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.
  - 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.

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- 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.
- I. Records of Environmental Qualification which are covered under the provisions of Technical Specification 6.13.
- m. Records of reviews performed for changes made to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM) 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;

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- 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;
- I. 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 (REMODCM) and the Process Control Program.

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

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