APPENDIX A

QUALITY ASSURANCE PROGRAM (QAP)
TOPICAL REPORT - MILLSTONE POWER STATION
Unit 2/3 CATEGORY I STRUCTURES, SYSTEMS AND COMPONENTS

(Note: This Appendix is not applicable to Unit 1 - See DSAR, or to the ISFSI – See the FSAR for the Standardized NUHOMS Horizontal Modular Storage System for Irradiated Nuclear Fuel.)

The Materials, Equipment, and Parts List (MEPL) Program is the process used that provides instructions to identify structures, systems, components, parts, materials, and consumables that need to be safety-related and designated as Category I and 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 following structures, systems, and components of a Millstone Power Station nuclear unit, including their foundations and supports, are designated as Category I. The pertinent quality assurance requirements of Appendix B to 10 CFR 50 are applied to all activities affecting the safety-related function of the structures, systems, and components as listed below and to other items and services specifically identified by the licensee in each FSAR addressing Section 3.2.1 of NRC Regulatory Guide 1.70.

(a) The reactor coolant pressure boundary.

(b) The reactor core and reactor vessel internals.

(c) Systems or portions of systems that are required for (1) emergency core cooling; (2) post-accident containment heat removal or; (3) post-accident containment atmosphere cleanup (e.g., hydrogen removal system).

(d) Systems or portions of systems that are required for (1) reactor shutdown; (2) residual heat removal or; (3) cooling the spent fuel storage pool.

(e) Those portions of the steam and feedwater systems of pressurized water reactors extending from and including the secondary side of steam generators up to and including the outermost containment isolation valves, and connected piping of 2-1/2 inches or larger nominal pipe size up to and including the first valve (including a safety or relief valve) that is either normally closed or capable of automatic closure during all modes of normal reactor operation.

(f) Cooling water, component cooling and auxiliary feedwater systems or portions of these systems including the intake structures, that are required for: (1) emergency core cooling; (2) post-accident containment heat removal; (3) post-accident containment atmosphere cleanup; (4) residual heat removal from the reactor or; (5) cooling the spent fuel storage pool.

(g) Cooling water and seal water systems or portions of these systems that are required for functioning of safety-related reactor coolant system components such as PWR reactor coolant pump seals.

(h) Systems or portions of systems that are required to supply fuel for emergency equipment.

(i) All electrical and mechanical devices and circuitry between the process and the actuated devices involved in generating or responding to signals that provide protective functions of safeguard systems.

(j) Systems or portions of systems that are required for (1) monitoring of systems safety-related and; (2) actuation of systems safety-related.

"Required for monitoring," i.e. Those parameters that provide information that is essential to permit the control room operator to take specific manually controlled actions for the direct accomplishment of the specified safety function.

(k) The spent fuel storage pool structure, including the fuel racks.

(l) The reactivity control system (e.g., control rods, control rod drives, and boron injection system).

(m) The control room, including its associated equipment and all equipment needed to maintain the control room with safe habitability limits for personnel and safe environmental limits for vital equipment.

(n) Primary and secondary reactor containment.

(o) Systems other than radioactive waste management systems not covered by items (a) through (o) above which contain or may contain radioactive materials and whose postulated failure would result in conservatively calculated potential offsite doses (using meteorology as prescribed by Regulatory Guides 1.3 and 1.4) which are more than 0.5 rem to the whole body or its equivalent to any part of the body.

(p) The Class IE electric systems, including the auxiliary systems for the onsite electric power supplies, that provide the emergency electric power needed for functioning of plant features included in items (a) through (p) above.

(q) Those portions of structures, systems, or components whose continued function is not required but whose failure could reduce the functioning of any plant feature included in items (a) through (q) above to an unacceptable safety level or could result in incapacitating injury to occupants of the control room should be designed and constructed so that the SSE would not cause such failures.

(r) Items and services associated with Radioactive Material Transport Packages as described in 10CFR71.

CONSUMABLES

The following specific consumables when utilized in safety-related systems shall be included in those portions of this QAP, as applicable.

1. Emergency generator diesel fuels
2. Hydraulic snubber fluids
3. Reagents
4. Resins
5. Boric Acid
6. Lubricants

APPENDIX B

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

QUALIFICATION AND EXPERIENCE REQUIREMENTS

This appendix consolidates specific qualification and experience requirements for several key positions within the licensee organization. Much of this material was relocated from the Unit 3 Final Safety Analysis Report.

MANAGER - NUCLEAR OVERSIGHT

The Manager - Nuclear Oversight shall satisfy the following requirements:

Graduate of a four-year accredited engineering or science college or university, plus fifteen (15) or more years of industrial experience including five years in positions of leadership, such as lead engineer, project engineer, Audit team leader, etc. At least two years of this experience should be associated with nuclear Quality Assurance Activities, and at least one year of this experience is in a Quality Assurance Organization. A masters degree in engineering or business management is considered equivalent to two years of experience.

Note: The education and experience requirements should not be treated as absolute when similar training or an outstanding record provides reasonable assurance that a person can perform the required tasks.

ANSI N18.1-1971 Requirements

As stated in Appendix C, education and experience requirements for Millstone Station personnel are established by ANSI N18.1 as endorsed by Regulatory Guide 1.8-1977, subject to the exceptions in Appendix E. The table below identifies ANSI N18.1 requirements applicable to specific positions at Millstone Power Station.

Table B-1

Position	Applicable ANSI N18.1-1971 Requirements
Site Vice President	Plant Manager (4.2.1)*
Supervisor - Nuclear Chemistry	Radiochemistry (4.4.3)
Supervisor - Health Physics	Radiation Protection (4.4.4) - See Note 1
Manager - Nuclear Operations Supervisor - Nuclear Shift Operations	Operations Manager (4.2.2) - See Note 2
Shift Managers, Unit Supervisors	Supervisors Requiring AEC Licenses (4.3.1) See Note 3
Control Operators	Operators Requiring AEC Licenses (4.5.1) See Note 3
Plant Equipment Operators	Operators (4.5.1)
Supervisor - Nuclear Maintenance (Electrical/I&C/GTS)	Instrumentation & Control (4.4.2)
Manager - Nuclear Maintenance Supervisor - Nuclear Maintenance	Maintenance Manager (4.2.3)
Mechanics, Electricians, Technicians (repairmen)	Repairmen (4.5.3)
Manager - Nuclear Site Engineering Manager - Nuclear Engineering Manager - Nuclear Design Engineering Manager - Nuclear Fuel Engineering Manager - Nuclear Site Services Manager - Nuclear Outage and Planning	Technical Manager (4.2.4)
Supervisor - Reactor Engineering	Reactor Engineering and Physics (4.4.1)

* Numbers in () refer to section numbers in ANSI N18.1-1971.

Notes:

1. For the position of Supervisor - Health Physics the qualifications considered as minimum acceptable substitutes for a bachelor's degree equivalent are: a high school diploma or its equivalent and four years of applied Managerial experience at a nuclear facility in the area of radiation protection.

2. If the Manager - Nuclear Operations does not hold an SRO license for Unit 3, then the Manager - Nuclear Operations shall have held an SRO license at a pressurized water reactor (PWR), and the Supervisor - Nuclear Shift Operations shall hold an SRO license for Unit 3 and meet the qualification requirements of Section 4.3.8, "Operations" of ANSI/ANS 3.1-1987, "American National Standard for Selection, Qualification and Testing of Personnel for Nuclear Power Plants" (in accordance with Section 4.2.2 reference to the Operations Middle Manager).

   If the Manager - Nuclear Operations does not hold an SRO license for Unit 2, then the Manager - Nuclear Operations shall have held an SRO license at a PWR, and an individual serving in the capacity of the Supervisor - Nuclear Shift Operations shall hold an SRO license for Unit 2 and meet the

qualification requirements of Section 4.3.8, "Operations" of ANSI/ANS 3.1-1987, "American National Standard for Selection, Qualification and Testing of Personnel for Nuclear Power Plants" (in accordance with Section 4.2.2 reference to the Operations Middle Manager).

3. As of November 1, 2001, applicants for reactor operator and senior reactor operator qualification shall meet or exceed the education and experience guidelines of Regulatory Guide 1.8, Revision 3, May 2000.

APPENDIX C

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

REGULATORY GUIDE AND ANSI/IEEE STANDARD COMMITMENTS

NOTE: This QAP is committed to utilize the guidance obtained from the following regulatory documents and their endorsed standards. Exceptions to these positions are listed in Appendix E of this Topical Report.

Appendix B to 10 CFR, Part 50 - Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants.

10 CFR 50, Section 50.54, Condition of Licenses.

10 CFR 50, Part 55 - Operator's Licenses and its Appendix A - Requalification Programs for Licensed Operators of Production and Utilization Facilities.

Regulatory Guide 1.8 - I - R - 5/77 - Personnel Selection and Training - Endorses ANSI N18.1 - 1971.

Regulatory Guide 1.28 - 2/79 - Quality Assurance Program Requirements (Design and Construction) Endorses ANSI N45.2-1977.

Regulatory Guide 1.30 - (Safety Guide 30), 8-11-72 - Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electrical Equipment - Endorses ANSI N45.2.4-1972.

Regulatory Guide 1.33 - 2/78 - Quality Assurance Program Requirements (Operation) - Endorses ANSI N18.7-1976/ANS3.2.

Regulatory Guide 1.37 - Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants, 3-16-73 - Endorses ANSI N45.2.1 1973.

Regulatory Guide 1.38 - Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants, 5/77 - Endorses ANSI N45.2.2 - 1972.

Regulatory Guide 1.39 - Housekeeping Requirements for Water-Cooled Nuclear Power Plants, 9/77 - Endorses ANSI N45.2.3-1973.

Regulatory Guide 1.58 - Qualification of Nuclear Power Plant Inspection, Examination, and Testing Personnel, Rev. 1, 9/80 - Endorses ANSI N45.2.6-1978.

Regulatory Guide 1.64 - Quality Assurance Requirements for the Design of Nuclear Power Plants, 6/76 - Endorses ANSI N45.2.11-1974.

Regulatory Guide 1.70 - "A Guide for the Organization and Content of Safety Analysis Reports" Revision 0, June 30, 1966 was utilized for Millstone Power Station Unit No. 2; however, certain revised sections of the Unit 2 Final Safety Analysis Report are written to the Revision 3 format. Revision 3, November 1978 is utilized for Millstone Power Station Unit No. 3. This Reg. Guide is not applicable to Unit 1.

Regulatory Guide 1.88 - Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records - 10/76 Endorses ANSI N45.2.9-1974.

Regulatory Guide 1.94 - Quality Assurance Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plant - 4/76 - Endorses ANSI N45.2.5 - 1974 and Section 6.11 of ANSI N45.2.5-1978.

Regulatory Guide 1.116 - Quality Assurance Requirements for Installation, Inspection, and Testing Mechanical Equipment and Systems - 5/77 - Endorses ANSI N45.2.8-1975.

Regulatory Guide 1.123 - Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants - 7/77 - Endorses ANSI N45.2.13-1976.

Regulatory Guide 1.144 - Auditing of Quality Assurance Programs for Nuclear Power Plants - Rev. 1 - 9/80 Endorses ANSI N45.2.12 - 1977.

Regulatory Guide 1.146 - Qualification of Quality Assurance Program Audit Personnel For Nuclear Power Plants - 8/80 Endorses ANSI N45.2.23-1978.

Regulatory Guide 1.152 - "Criteria for Digital Computers in Safety Systems of Nuclear Power Plants", January 1996 - Endorses IEEE ANS 7 - 4.3.2 - 1993.

APPENDIX D

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

GLOSSARY OF QUALITY ASSURANCE TERMS

Accept As Is - (also known as "Use-As-Is") A disposition which may be imposed for a nonconformance when it can be established that the discrepancy will result in no adverse conditions and that the item under consideration will continue to meet all engineering functional requirements including performance, maintainability, fit and safety.

Approved Vendors - Vendors approved to provide material, equipment, parts or services under their quality assurance program.

As-Built Documents - Documents which accurately describe the condition actually achieved in a system, structure, or component. These documents include: material certification and test data; reports of inspections, examinations, and test results; drawing, specifications, procedures, and instructions; and records of nonconformance and their resolution.

Audit - A documented activity performed in accordance with written procedures or checklists to verify by examination and evaluation of objective evidence that applicable elements of the quality assurance program have been developed, documented, and effectively implemented in accordance with specified requirements.

Augmented Quality - Nonsafety-related items for which a design basis or regulatory commitment has been made. The augmented quality items are included within the scope of Quality Assurance Program. These items fall under nuclear indicators such as FPQA (Fire Protection Quality Assurance), RWQA (Radwaste Quality Assurance), ATWS (Anticipated Transient Without Scram) and SBOQA (Station Blackout Quality Assurance).

Calibration - The process by which measuring and test equipment are checked against standards of known higher accuracy and adjusted as necessary to assure their compliance with designated specifications.

Category I - Designation given to safety-related structures, systems, and components (SSC) of a licensee nuclear power plant and material, equipment, parts, consumables, and services applicable to the safety-related functions of these SSCs.

Category 1 Structures, Systems and Components - For Units 2 and 3, defined in each unit FSAR and functionally described in Appendix A. For Unit 1, defined in the DSAR.

Cleaning - Those actions performed to maintain an item in accordance with cleanliness requirements.

Commercial Grade Item (CGI) - A commercial grade item per 10CFR21 is a structure, system, or component, or part thereof that affects its safety function that was not designed and manufactured as a basic component. Commercial grade items do not include items where the design and manufacturing process require in-process inspections and verifications to assure that defects or failures to comply are identified and corrected (i.e., one or more critical characteristics of the item cannot be verified).

Commercial Grade Survey - Activities conducted by the purchaser to ascertain and verify that a supplier or manufacturer of commercial grade items, controls the technical and quality characteristics determined to be critical for satisfactory performance of specifically designated commercial grade items, as a method to accept those items for safety-related use.

Condition Adverse to Quality - Failures, malfunctions, deficiencies, deviations, defective materials and equipment, abnormal occurrences and nonconformances.

Contractor - Any organization under contract for furnishing items or services.

Corrective Action - Action taken to correct an identified condition adverse to quality.

Deficiency - Lacking some essential quality (e.g. defective, imperfect, not sufficient, inadequate in amount, quality and/or degree.)

Department - The use of the word "Department" throughout this QAP can refer to any portion of the licensee organization (i.e., Group, Division, Department, Branch, Section, or Unit, as applicable).

Design - The technical and management process which leads to and includes the issuance of design output documents such as drawings, specifications, and other documents defining technical requirements of structures, systems, and components.

Design Changes - Changes in drawings and specifications that define the design of structures, systems, and components of nuclear power plants.

Design Documents - The drawing, calculation, specification, or other document(s) that define the technical requirements of structures, systems, or components.

Dominion Energy - The company which owns Dominion Nuclear Connecticut, Inc.

Dominion Nuclear Connecticut, Inc. - The subsidiary of Dominion Energy responsible for the operation of the Millstone Power Station nuclear units. (also referred to as "licensee")

Engineering Service Organization - Organizations that provide services such as analysis, computer software, testing, and inspection.
Group - The use of the word "group" in Section 1.0 of this QAP refers to a portion of the licensee organization as applicable (i.e., Department, Unit, Branch).

Handling - An act of physically moving an item by hand or by mechanical machinery, but not including transport modes.

Identification - A means by which material, equipment and parts can be traced to their associated documentation through the use of heat numbers, lot numbers, part numbers, serial numbers, or other appropriate means.

Item - Any level of unit assembly, including structures, systems, subsystems, subassembly, component, part, or material.

Inspection - A phase of quality control which, by means of examination, observation, or measurement, determines the conformance of material, supplies, components, parts, appurtenances, systems, processes, structures, or services to predetermined quality requirements.

Inspection Status - Identification of material, equipment, and parts that have completed inspection, either acceptable or unacceptable.

Licensing Basis - The set of requirements that includes the applicable NRC regulations, plant - specific NRC requirements, plant - specific design basis and regulatory commitments that are docketed and in effect.

Life Records - Those quality documents that are maintained for the lifetime of an in-service nuclear power plant (the duration of the operating license) or for the life of the particular component or part. Life records are those which would be of significant value in meeting one or more of the following criteria:

(1) demonstrating capability for safe operation.

(2) maintaining, reworking, repairing, replacing or modifying the item.

(3) determining the cause of an accident or malfunction of an item.

(4) providing required base line data for in-service inspection.

Licensee - Dominion Nuclear Connecticut , Inc., current License holder.

Material Request - A formal electronic request for the purchase of material, equipment, parts and/or services.

Measuring and Test Equipment - Those instruments, gages, tools, fixtures, reference and transfer standards, nondestructive test equipment, and measuring devices used during inspection and testing to determine that the measuring and test parameters comply with appropriate requirements in specifications and drawings.

Nonconformance - A deficiency in characteristic documentation or procedure which renders the quality of an item unacceptable or indeterminate.

Non-Life Records - Those quality documents that are maintained for a specific period of time other than the lifetime of the in-service nuclear power plant or the particular component or part.

Nuclear Grade - The procurement classification applied to all materials and services intended for items listed as Category I (CAT I) in the MEPL. These may require validating documentation such as Certificate of Material Test Report, Certificate of Conformance, Certificate of Compliance, personnel qualifications, etc., as specified by codes or standards, and have been designed/qualified for a nuclear application. Nuclear Grade items are manufactured/qualified under a 10CFR50, Appendix B program with the vendor responsible for 10CFR21. The vendor should be an "Approved Vendor".

Nuclear Procedures and Document Administration - The organization responsible for establishing the Nuclear Plant Records Program which is implemented at licensee records retention facilities.

Objective Evidence - Any statement of fact, information, or record, either quantitative or qualitative, pertaining to the quality of an item or service based on observation, measurements, or tests which can be verified.

Preservation - Those actions performed to maintain an item in its original and usable condition.

Procedures and Instructions - Documents that specify how an activity is to be performed. They may include methods to be employed; material, equipment, or parts to be used; and a sequence of operations.

Procurement Documents - Purchase requisitions/material requests, purchase orders, contracts, drawings, specifications or instructions used to define requirements for purchase.

Product Acceptance Test - Activities conducted as part of the receiving or source inspection process to verify acceptability of one or more critical characteristics of the item being inspected.

Purchased Material, Equipment, and Parts (MEP) - Items procured for installation in the Millstone Station nuclear power plants quality structures, systems, and components, and items procured as spare MEP for potential installation in those structures, systems, and components.

Purchased Services - Services provided by vendor when requested under a QA Material Request and performed under a quality assurance program other than this QAP. (Synonymous with "Services" and "Quality Services" in this QAP.)

Quality Activities - All activities affecting the safety functions of structures, systems, and components; these activities include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying. Quality activities also include those activities associated with Augmented Quality (including Radwaste Packaging and Shipping) and other regulated programs to which this QAP is applicable.

Quality Assurance Records - Any record pertaining to the quality of material, equipment, parts, processes, or operations relating to structures, systems, and components which are founded on observations, measurements, or tests which can be fully checked or verified. Such statements may be recorded on a written or preprinted document or tag. The statements are authorized with a signature or stamp identifiable to the person making the statement of fact.

Quality Assurance Program (QAP) - Millstone Power Station - Consists of this QAP Topical Report, Nuclear Oversight procedures and other Licensee Group/Division/Department/Branch/ Section/Unit quality procedures.

Quality Structures, Systems and Components - Structures, systems, and components (SSC) including Safety-Related SSCs, Augmented Quality items, and items under other regulated programs to which this QAP is applicable.

Quality Procedures - Those Nuclear Oversight Department and other department procedures which implement the requirements of this QAP.

Repair - A disposition applied to nonconforming material, equipment, and parts that are unsuitable for their intended purpose which are modified by the use of additional operations and/or processes so that they are suitable for their intended purpose but may not meet all specified requirements.

Reportable Item - An event or condition that could affect nuclear plant safety and must be reported to the NRC in accordance with regulatory requirements such as 10CFR50.72, 10CFR50.73, or 10CFR50.9(b).

Responsible Engineer - A licensee employee assigned the responsibility to coordinate the engineering activities addressed in QAP. The responsible engineer may be designated as the project engineer.

Retest - A test conducted prior to operation following installation inspections of work associated with maintenance and refueling to verify that structures, systems, and components will function satisfactorily when in operation. A retest may also be performed when original test results are invalidated.

Return to Vendor - A disposition applied to nonconforming material, equipment, and parts that are unsuitable for their intended purpose but which are feasible to repair or rework at a vendor's facility.

Rework - A disposition applied to nonconforming material, equipment, and parts that are unsuitable for their intended purpose due to incomplete operations or variations from original engineering requirements but which are modified through the use of additional operations or processes to meet all specified requirements.

Safety-Related Structures, Systems and Components - Those structures, systems and components that are relied on to remain functional during and following design basis (postulated) events to assure:

1) The integrity of the reactor coolant pressure boundary;
2) The capability to shut down the reactor and maintain it in a safe shutdown condition; and
3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the applicable guideline exposures set forth in 10CFR50.34(a)(1) or 10CFR100.11 as applicable.

Significant Condition Adverse to Quality - A condition adverse to quality involving actual or potential consequences that have a serious impact on public or personnel health and safety or plant operations, and requiring a root cause evaluation to determine corrective action to prevent recurrence.

Special Processes - Processes for which the desired level of quality can only be assured through the use of additional process controls, and where control through direct inspection alone is inadequate, impossible, or disadvantageous. These processes are performed under controlled conditions in accordance with special requirements utilizing qualified procedures, equipment, and personnel. Special processes may include, but are not limited to welding, brazing, soldering, cleaning, heat treating, and nondestructive testing.

Station Blackout - The complete loss of alternating current electric power to the essential and non-essential switchgear buses in a nuclear power plant as defined in 10CFR50.2. It involves the loss of offsite power concurrent with turbine trip and failure of the onsite emergency ac power system, but not the loss of available ac power to buses fed by Station batteries through inverters or the loss of power from alternate ac sources.

Storage - The act of holding an item at the site in an area other than its permanent location in a plant.

Surveillance – The act of monitoring or observing to verify whether an item or activity conforms to specified requirements.

Test and Operating Status - Identification of material, equipment, and parts that are ready for test or operation, or an existing stage of a test operation.

Testing - The determination or verification of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions.

Vendors - Organizations that provide material, equipment, parts, computer software, or services. This includes contractors, engineering service organizations, and consultants. (Synonymous with "Supplier" in this QAP)

Work Procedures and Work Documents - Procedures, instructions, and documents used to control and document maintenance and modification work performed on Millstone Station nuclear plant structures, systems, and components.

APPENDIX E

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

PROGRAM EXCEPTIONS

1. ANSI N45.2.9, states in part, "structure, doors, frames, and hardware should be Class A fire-related with a recommended four-hour minimum rating." The three record storage vaults onsite have a two-hour rating.

   The licensee's vaults are used for storage of documentation that is unsuitable for filming or awaiting filming.

   A records organization exists along with written procedures addressing the control of quality assurance records.

2. Deleted

3. ANSI N45.2.9-1974, paragraph 1.4, definition of "Quality Assurance Records" states in part: "For the purposes of this standard, a document is considered a quality assurance record when the document has been completed."

   The licensee has developed the following alternative definition to provide guidance during the interim period from the time a document is completed until it is transmitted to the licensee records retention facilities:

   "A record is considered a working document until it is transmitted to the licensee records retention facilities at which time it is designated as a Quality Assurance Record. The following maximum time limits are established for the transmittal of working documents to the licensee records retention facilities:

   Operations Documents - Documentation generated during plant operations may be maintained, as needed, by operating plant departments, for up to one year.

   New Construction or Betterment Documents - Documents which evolve during new construction or betterment projects shall be transmitted to licensee records retention facilities within 90 days of completion of a new construction project or turnover of a betterment project or plant operations.

   Procurement Documents - Inspection/Surveillance/Audit Reports generated during vendor oversight activities which are used to maintain vendor status for current and future procurements may be maintained, as needed, by Document Administration for up to three years.

   All Other Working Documents - All other working documents shall be transmitted to licensee records retention facilities within 6 months of their receipt or completion."

The requirements of ANSI N45.2.9-1974 do not apply to these "working documents" based on paragraph 1.1 of the ANSI standard which states:

"It (ANSI N45.2.9) is not intended to cover the preparation of the records nor to include working documents not yet designated as Quality Assurance Records."

4. Regulatory Guide 1.64 - 6/76, the Regulatory position states, in part, "It should not be construed that such verification constitutes the required independent design verification." The licensee has developed the following alternative to allow for adequate independent design verification:

   This review may be performed by the originator's Supervisor, only if the Supervisor:

   Did not specify a singular design approach;

   Did not establish the design inputs or did not rule out certain Design considerations;

   Is the only individual in the organization competent to perform the review.

   Where the Supervisor performs the design review, the next level of management shall fulfill the Supervisor's responsibilities.

5. ANSI N45.2.13 - 1976, paragraph 10.3.4, states in part: "Post-Installation Test requirements and acceptance documentation (should) shall be mutually established by the purchaser and supplier." Involvement by the supplier in establishing Post-Installation Test requirements and acceptance documentation is requested only when it is deemed necessary and proper by the responsible engineering organization.

   The licensee no longer has any nuclear plants under construction. As a result, most procurements are made for spare parts from suppliers who are not the original equipment manufacturer. In these cases, the supplier may have little or no understanding or knowledge of either the operation of the system the component is to be installed in, or applicable Post-Installation Test requirements and acceptance documentation. As such, the licensee assumes responsibility for establishing Post Installation Test requirements and acceptance documentation.

6. ANSI N45.2.2 - 1972, paragraph 1.2, states in part that, "The requirements of this standard apply to the work of any individual or organization that participates in the packaging, shipping, receiving, storage, and handling of items to be incorporated into nuclear power plants."

   Since a portion of the licensee procurement activities involve commercial suppliers which do not fully comply with the requirements of ANSI N45.2.2, the licensee's Supply Chain Management organization verifies through source inspections, receipt inspection, and/or survey activities that the quality of the materials, items, components or equipment is preserved by those suppliers to the extent that packaging, shipping, storage and handling methods are employed which are commensurate with the nature of the product.

7. ANSI N18.1-1971, paragraph 4.2.2, states in part "The Operations Manager shall hold a Senior Reactor Operator's license". The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendment 132 for the Millstone Power Station Unit No. 3 license which allows that:

   If the Operations Manager does not hold a Senior Reactor Operator license for Millstone Unit No. 3, then the Operations Manager shall have held a Senior Reactor Operator license at a pressurized water reactor, and the Assistant Operations Manager (Supervisor - Nuclear Shift Operations) shall hold a Senior Reactor Operator license for Millstone Unit No. 3 and meet the qualification requirements of Section 4.3.8, "Operations" of ANSI/ANS 3.1-1987, "American National Standard for Selection, Qualification and Testing of Personnel for Nuclear Power Plants" (in accordance with Section 4.2.2 reference to the Operations Middle Manager).

8. ANSI N18.1-1971, paragraph 4.2.2, states in part "The Operations Manager shall hold a Senior Reactor Operator's license". The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendments 178 and 190 for the Millstone Power Station Unit No. 2 license which allows that:

   If the Operations Manager does not hold a Senior Reactor Operator license for Millstone Unit No. 2, then the Operations Manager shall have held a Senior Reactor Operator license at a pressurized water reactor, and an individual serving in the capacity of the Assistant Operations Manager (Supervisor - Nuclear Shift Operations) shall hold a Senior Reactor Operator license for Millstone Unit No. 2 and meet the qualification requirements of Section 4.3.8, "Operations" of ANSI/ANS 3.1-1987, "American National Standard for Selection, Qualification and Testing of Personnel for Nuclear Power Plants" (in accordance with Section 4.2.2 reference to the Operations Middle Manager).

9. Regulatory Guide 1.33 - 2/78, regarding audits, states in part:

   (a) "The results of actions taken to correct deficiencies...at least once per 6 months."

   (b) "...technical specifications and applicable license conditions - at least once per 12 months."

   (c) "The performance, training, and qualifications of the facility staff - at least once per 12 months."

   The licensee has developed an alternative which modifies these Audit frequencies to at least once per 24 months. This alternative has previously been accepted by the NRC via license amendments 79, 184, and 104 for MP1, MP2, and MP3, respectively.

10. Deleted.

11. ANSI N45.2.13-1976, paragraph 10.3.5., states in part, "in certain cases involving procurement of services only, such as third party inspection; engineering and consulting services, and installation, repair, overhaul or maintenance work; the Purchaser may accept the service by any or all of the following methods:

(a) Technical verification of the data produced
(b) Surveillance and/or audit of the activity
(c) Review of the objective evidence for conformance to the procurement document requirements such as certifications, stress reports, etc."

In order to maintain the independence requirement of the NRC's August 14, 1996 Order, the licensee will not perform an acceptance review of the work produced by the vendors contracted to conduct the Independent Corrective Action Verification Program. This work will be performed in accordance with the vendor's own approved, 10 CFR 50 Appendix B Quality Assurance Program. Not applicable to Unit 1.

12. Deleted.

13. Regulatory Guide 1.70 Revision 3, November 1978 Section 17.1.2.4 states in part: "The PSAR should include a listing of QA program procedures or instructions that will be used to implement the QA program for each major activity such as design, procurement, construction, etc. The procedure list should identify which criteria of Appendix B to 10 CFR 50 are implemented by each procedure". Not applicable to Unit 1.

The licensee has developed an alternative to this requirement where procedure indices are maintained which identify the procedures that implement the Quality Assurance Program for Millstone Power Station and which, by title and originating organization, indicate the Appendix B to 10 CFR 50 criterion being implemented.

14. ANSI N18.7-1976, Paragraph 5.2.15, "Review, Approval, and Control of Procedures," states in part: "Plant procedures shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable."

The licensee implements administrative and programmatic controls that ensure procedures are maintained current in accordance with 10CFR50, Appendix B, thus meeting the intent of the biennial review.

The licensee implements administrative controls to perform biennial reviews of non-routine procedures such as Emergency Operating Procedures (EOP's), Abnormal Operating Procedures (AOP's), Off Normal Procedures (ONP's), Emergency Plan, Security and other procedures that may be dictated by an event.

Programmatic controls specify conditions when the mandatory review of plant procedures apply, and include a requirement to review applicable procedures following an accident or transient and following any modification to a system.

The licensee utilizes a pre-job briefing practice to ensure that personnel are aware of what is to be accomplished and what procedures will be used prior to beginning a job. In addition, the Procedure Compliance Policy requires that the job be stopped and the procedure be revised or the situation resolved prior to work continuing if procedures cannot be implemented as written.

Additionally, the licensee's Quality Assurance Program requires the review of a representative sample of plant procedures as part of routine audits and surveillances to ensure that existing administrative controls for procedure verification, review and revision are effective in maintaining the quality of plant procedures. Significant procedural deficiencies are identified and corrected through the Station Corrective Action Program. The Station Self-Assessment Program also periodically reviews selected procedures and identifies deficiencies and improvements through the Corrective Action Program.

15. Denied NRC approval. Number not reused.

16. Deleted. (Superceded by Exception #21.)

17. ANSI N18.1-1971, paragraph 4.3.1, states in part, "A Supervisor (requiring an AEC license) shall have a minimum of a high school diploma or equivalent, and four years of responsible power plant experience, of which a minimum of one year shall be nuclear power plant experience. A maximum of two years of the remaining three years of power plant experience may be fulfilled by academic or related technical training on a one-for-one basis." The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendment 258 for the Millstone Power Station No. 2 which allows that:

    Beginning November 1, 2001, applicants for senior reactor qualification shall meet or exceed the education and experience guidelines given in Revision 3 to Regulatory Guide 1.8 (May 2000).

18. ANSI N18.1-1971, paragraph 4.3.1, states in part, "A Supervisor (requiring an AEC license) shall have a minimum of a high school diploma or equivalent, and four years of responsible power plant experience, of which a minimum of one year shall be nuclear power plant experience. A maximum of two years of the remaining three years of power plant experience may be fulfilled by academic or related technical training on a one-for-one basis." The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendment 199 for the Millstone Power Station No. 3 which allows that:

    Beginning November 1, 2001, applicants for senior reactor qualification shall meet or exceed the education and experience guidelines given in Revision 3 to Regulatory Guide 1.8 (May 2000).

19. ANSI N18.1-1971, paragraph 4.5.1, states in part, "An operator (to be licensed by the AEC) shall have a minimum of a high school diploma or equivalent, and two years of power plant experience, of which a minimum of one year shall be nuclear power plant experience." The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendment 258 for the Millstone Power Station No. 2 which allows that:

    Beginning November 1, 2001, applicants for reactor qualification shall meet or exceed the education and experience guidelines given in Revision 3 to Regulatory Guide 1.8 (May 2000).

20. ANSI N18.1-1971, paragraph 4.5.1, states in part, "An operator (to be licensed by the AEC) shall have a minimum of a high school diploma or equivalent, and two years of power plant experience, of which a minimum of one year shall be nuclear power plant experience." The licensee has developed an alternative to this requirement which has been accepted by the NRC via amendment 199 for the Millstone Power Station No. 3 which allows that:

Beginning November 1, 2001, applicants for reactor qualification shall meet or exceed the education and experience guidelines given in Revision 3 to Regulatory Guide 1.8 (May 2000).

21. ANSI N18.7-1976, paragraph 4.5, states in part, "Audits of selected aspects of operational phase activities shall be performed with a frequency commensurate with their safety significance and in such a manner as to assure that an audit of all safety-related functions is completed within a period of two years."

The licensee has established a 25% extension to the 24-month frequency for most internal audits. This 25% extension will not be applied to those audits which have frequencies specifically delineated by the Code of Federal regulations (i.e. Emergency Preparedness Program which satisfies the requirements of 10CFR50.54(t), or Physical Security Plan which satisfy the requirements of 10CFR50.54(p)(3); 73.56(g)(1) and (g)(2); and 73.55(g)(4), and the Fitness for Duty Program which satisfies 10CFR26.80). The frequencies of these audits are described in their respective plans and/or programs

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

ADMINISTRATIVE CONTROLS[1]

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

REVIEW AND AUDIT

Site Operations Review Committee (SORC)

Function

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

Composition

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

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

Each SORC member shall meet the following minimum qualifications:

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

or

2) Hold a management position, and have a minimum of five years technical experience in their respective field of expertise.

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

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

Alternates

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

Meeting Frequency

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

Quorum

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

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

Responsibilities

The SORC shall be responsible for:

a. Review of 1) all procedures required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.5 and changes thereto, 2) all programs required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.6 and changes thereto, 3) Site ISFSI operating procedures as required by CoC 1004, 4) any other proposed procedures, programs, or changes thereto as determined by the SVP/CNO - Dominion Nuclear Connecticut, Inc., Senior Vice President - Nuclear Operations, or Site Vice President - Millstone to affect site nuclear safety. Programs and procedures required by Unit 2/3 Technical Specification 6.8 or Unit 1 Technical Specification 5.5 and 5.6 that are designated for review and approval by the Station Qualified Reviewer Program do not require SORC review.

b. Review of all proposed changes to Technical Specifications.

c. Review of all proposed tests and experiments that affect nuclear safety.

d. Review of all proposed changes or modifications to systems or equipment that affect nuclear safety.

e. Render determinations in writing or meeting minutes if any item considered under (a) through (d) above, as appropriate and as provided by 10CFR50.59, 10CFR72.48 or 10CFR50.92, requires a license amendment or requires a significant hazards consideration determination.

f. Performance of special reviews and investigations and reports as requested by the Chairperson of Management Safety Review Committee.

g. Review of the fire protection program and implementing procedures.

h. Investigations of all violations of Technical Specifications, including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence, to the Site Vice President - Millstone, SVP/CNO - Dominion Nuclear Connecticut, Inc., Senior Vice President - Nuclear Operations, and to the Chairperson of the Management Safety Review Committee;

i. Review of all Millstone Power Station REPORTABLE EVENTS;

j. Review of facility operations to detect potential safety hazards;

k. Review of Unit 3 Turbine Overspeed Protection Maintenance and Testing Program and revisions thereto.

Authority

The SORC shall:

a. Recommend to the Site Vice President - Millstone written approval or disapproval in meeting minutes of items considered under Responsibilities (a) through (k) above. The Site Vice President - Millstone will report to the Senior Vice President - Nuclear Operations and the SVP/CNO - Dominion Nuclear Connecticut, Inc., any issues that require higher level of authority.

b. Provide immediate written notification or meeting minutes to the Senior Vice President - Nuclear Operations, the SVP/CNO - Dominion Nuclear Connecticut, Inc. and the Chairperson of the Management Safety Review Committee of disagreement between the SORC and the Site Vice President - Millstone; however, the Senior Vice President - Nuclear Operations shall have responsibility for resolution of such disagreements pursuant to Unit 2/3 Technical Specification 6.1.1 and Unit 1 Technical Specification 5.1.1.

Records

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

Management Safety Review Committee (MSRC)

Function

The minimum qualifications of MSRC members are as follows:

a. The Chairperson and MSRC members shall have:

   1. An academic degree in an engineering or physical science field, or hold a senior management position, and

   2. A minimum of five years technical experience in their respective field of expertise.

b. The MSRC shall have experience in and shall function to provide independent oversight review and audit of designated activities in the areas of:

1. Nuclear power plant operations;

2. Nuclear engineering;

3. Chemistry and radiochemistry;

4. Metallurgy;

5. Instrumentation and control;

6. Radiological safety;

7. Mechanical and electrical engineering; and

8. Quality assurance practices.

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

Composition

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

Alternates

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

Meeting Frequency

The MSRC shall meet at least once per calendar quarter.

Quorum

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

Review Responsibilities

The MSRC shall be responsible for the review of:

a. The evaluations for changes to the facility and procedures, and tests or experiments completed under the provisions of 10 CFR 50.59 or 10CFR72.48, to verify that such actions did not require a license amendment as defined in 10 CFR 50.59 or 10CFR72.48;

b. Proposed changes to the facility or procedures that require a license amendment as defined in 10 CFR 50.59 or 10CFR72.48;

c. Proposed tests or experiments that require a license amendment as defined in 10 CFR 50.59 or 10CFR72.48;

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 or 10CFR72.75;

g. Indications of significant unanticipated deficiencies in any aspect of design or operation of structures, systems, or components that could affect nuclear safety;

h. Significant accidental, unplanned, or uncontrolled radioactive releases, including corrective actions to prevent recurrence;

i. Significant operating abnormalities or deviations from normal and expected performance of equipment that could affect nuclear safety;

j. The performance of the corrective action program; and

k. Audits and audit plans.

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

Audit Program Responsibilities

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

a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions;

b. The training and qualifications of the unit staff;

c. The implementation of all programs required by Units 2/3 Technical Specification 6.8 and Unit 1 Technical Specification 5.6;

d. The Fire Protection Program and implementing procedures.

e. The fire protection equipment and program implementation utilizing either a qualified offsite license fire protection engineer or an outside independent fire protection consultant.

f. Actions taken to correct deficiencies occurring in equipment, structures, systems, components, or method of operation that affect nuclear safety; and

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

Records

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

a. Results of the activities conducted under the provisions of this MSRC Section;

b. Deleted

c. Deleted

Station Qualified Reviewer Program

Function

The designated manager, designated officer, Site Vice President - Millstone may establish a Station Qualified Reviewer Program whereby required reviews of designated procedures or classes of procedures required by SORC, Responsibilities item (a) are performed by Station Qualified Reviewers and approved by designated managers. These reviews are in lieu of reviews by the SORC. However, procedures which require a 10 CFR 50.59 or 10CFR72.48 evaluation in accordance with the station 50.59 or 72.48 Screen and Evaluation procedure must be reviewed by the SORC.

Responsibilities

The Station Qualified Reviewer Program shall:

a. Provide for the review of designated procedures, programs, and changes thereto by a Qualified Reviewer(s) other than the individual who prepared the procedure, program, or change.

b. Ensure cross-disciplinary review of procedures, programs, and changes thereto when organizations other than the preparing organization are affected by the procedure, program, or change. These are performed by the affected disciplines, or by other persons designated by cognizant manager or director as having specific expertise required to assess a particular procedure, program, or change. Cross-disciplinary reviewers may function as a committee.

c. Provide for written recommendation by the Qualified Reviewer(s) to the designated manager for approval or disapproval of procedures and programs considered under SORC Responsibilities item (a), and ensure that the procedure or program was screened by a qualified individual and found not to require a 10 CFR 50.59 evaluation or 10CFR72.48 evaluation.

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

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

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

Records

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

Training and Qualification

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

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

OR

b. Six years of nuclear power plant experience;

OR

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

SAFETY LIMIT VIOLATION - Units 2 and 3

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

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

RECORD RETENTION - Units 1 and 2

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

a. Records and logs of facility operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS.

d. Records of surveillance activities, inspections, and calibrations required by these technical specifications.

e. Records of reactor tests and experiments.

f. Records of changes made to operating procedures.

g. Records of radioactive shipments.

h. Records of sealed source leak tests and results.

i. Records of annual physical inventory of all sealed source material of record.

(2) The following records shall be retained for the duration of the facility operating license:

a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records of radiation exposure for all individuals entering radiation control areas.

e. Records of gaseous and liquid radioactive material released to the environs.

f. Records of transients or operational cycles for those facility components designed for a limited number of transients or cycles.

g. Records of training and qualification for current members of the plant staff.

h. Records of inservice inspections performed pursuant to the Technical Specifications.

i. Records of quality assurance activities required by the QA Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR Part 50.59 or 10CFR72.48.

k. Records of meetings of the MSRC and the SORC.

l. Records of Environmental Qualification (which are covered under the provisions of Technical Specification 6.13. for Unit 2)

m. Records of reviews performed for changes made to the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (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;

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 Parts 50.59 or 72.48.

k. Records of meetings of the MSRC and the SORC;

l. Records of the service lives of all hydraulic and mechanical snubbers required by Technical Specification 3.7.10 including the date at which the service life commences and associated installation and maintenance records;

m. Records of secondary water sampling and water quality; and

n. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.

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

APPENDIX G
TECHNICAL SPECIFICATION POSITION CROSS REFERENCE

MILLSTONE UNIT 1

T.S. SECTION	T.S. POSITION	STATION ORGANIZATION POSITION
Responsibility		
5.1.1	designated officer designated manager	Site Vice President Director - Nuclear Station Operations & Maintenance
5.1.2	Shift Manager	Unit 2 Shift Manager
Organization		
5.2.1b Offsite and onsite organizations	designated manager	Director - Nuclear Station Operations & Maintenance
5.2.1c Offsite and onsite organizations	designated officer	Site Vice President
5.2.2g	Shift Manager	Unit 2 Shift Manager
***Facility* Staff Qualifications**		
5.3.1.1	operations manager or assistant operations manager	Manager - Nuclear Operations Unit 2 Supervisor Nuclear Shift Operations
5.3.1.2	radiation protection manager	Individual that meets TS position qualifications to perform Radiation Protection Manager duties and responsibilities (as designated by Director - Nuclear Station Safety & Licensing.)
Procedures		
5.5.1h	designated manager designated officer designated senior officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President Senior Vice President - Nuclear Operations
5.5.3	designated manager designated officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President
5.5.4	designated manager designated officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President
5.5.5c	designated manager designated officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President
5.5.6; 5.5.7	Individual from the organization responsible for ***the*** REMP	Individual from Nuclear ***Safety*** Engineering or designee
Programs and Manuals		
5.6.1	designated officer	Site Vice President

T.S. SECTION	T.S. POSITION	STATION ORGANIZATION POSITION
High Radiation Area		
5.8.2a.1	***Shift Manager*** ***radiation protection manager***	***Unit 2 Shift Manager*** ***Individual that meets TS position qualifications to perform Radiation Protection Manager duties and responsibilities (as designated by Director – Nuclear Station Safety & Licensing***

Notes:
Generic position titles are as approved by Amendment No. 105 to the Unit 1 Technical Specifications.

MILLSTONE UNIT 2

T.S. SECTION	T.S. POSITION	STATION ORGANIZATION POSITION
Responsibility		
6.1.1	designated officer *designated manager*	Site Vice President *Director - Nuclear Station Operations & Maintenance*
Organization		
6.2.1b Offsite and onsite organizations	designated manager	Director - Nuclear Station Operations & Maintenance
6.2.1c Offsite and onsite organizations	designated officer	Site Vice President
Facility Staff Qualifications		
6.3.1a	operations manager assistant operations manager	Manager - Nuclear Operations Unit 2 Supervisor Nuclear Shift Operations
6.3.1c	radiation protection manager	Individual that meets the position qualifications to perform Radiation Protection Manager duties and responsibilities (as designated by Director - Nuclear Station Safety & Licensing.)
Procedures		
6.8.2a	designated manager *designated officer* designated senior officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President Senior Vice President - Nuclear Operations
6.8.2b	designated manager designated officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President
6.8.5	Individual from the organization responsible for ***the*** REMP	Individual from Nuclear ***Safety*** Engineering or designee
High Radiation Area		
6.12.2.a.1	radiation protection manager	Individual that meets TS position qualifications to perform Radiation *Protection Manager duties and responsibilities* (as designated by Director - Nuclear Station Safety & Licensing.)
Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM)		
6.15b	designated officer	Site Vice President

Notes:
Generic position titles are as approved by Amendment No. 235 to the Unit 2 Technical Specifications

MILLSTONE UNIT 3

T.S. SECTION	T.S. POSITION	STATION ORGANIZATION POSITION
Responsibility		
6.1.1	designated officer designated manager	Site Vice President Director - Nuclear Station Operations & Maintenance
Organization		
6.2.1b Offsite and onsite organizations	designated manager	Director - Nuclear Station Operations & Maintenance
6.2.1c Offsite and onsite organizations	designated officer	Site Vice President
Facility Staff Qualifications		
6.3.1a	operations manager assistant operations manager	Manager - Nuclear Operations Unit 3 Supervisor Nuclear Shift Operations
6.3.1b	radiation protection manager	Individual that meets TS position qualifications to perform Radiation Protection Manager duties and responsibilities (designated by Director - Nuclear Station Safety & Licensing.)
Procedures *& Programs*		
6.8.2a	designated manager designated officer designated senior officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President Senior Vice President - Nuclear Operations
6.8.2b	designated manager designated officer	Director - Nuclear Station Operations & Maintenance Director - Nuclear Station Safety & Licensing Site Vice President
6.8.5	Individual from the organization responsible for ***the*** REMP	Individual from Nuclear ***Safety*** Engineering or designee
High Radiation Area		
6.12.2a.1	radiation protection manager	Individual that meets the position qualifications to perform Radiation Protection Manager duties and responsibilities (as designated by Director - Nuclear Station Safety & Licensing.)
Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM)		
6.13b	***designated officer***	***Site Vice President***

Notes:
Generic position titles are as approved by Amendment No. 171 to the Unit 3 Technical Specifications.