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DEC - 5 2000

B18247

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

Subject: Millstone Nuclear Power Station  
Unit No. 1, Docket No. 50-245  
Revision to Technical Specifications to Adopt the Proposed  
Improved Standard Technical Specifications for  
Permanently Shutdown and Defueled Facilities

Pursuant to 10 CFR 50.90, Northeast Nuclear Energy Company (NNECO) hereby submits a proposed revision to the Millstone Unit No. 1 Technical Specifications to reformat them to be consistent with the proposed Improved Standard Technical Specifications applicable to permanently shutdown and defueled facilities as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group. The proposed changes also modify the specifications to better reflect the decommissioned status of Millstone Nuclear Power Station, Unit No. 1. Other changes relocate requirements out of the Technical Specification to other controlled license basis documents, consistent with the Improved Standard Technical Specifications and guidance from the NRC staff.

Attachment 1 to this letter provides the proposed Technical Specifications and Bases. Attachment 2 provides annotated copies of the current Technical Specifications indicating the proposed changes. Attachment 3 provides a discussion of the proposed changes. Attachment 4 provides the Significant Hazards Considerations for the proposed changes. Attachment 5 provides the Environmental Assessment of the proposed changes.

In accordance with 10 CFR 50.91(b), we are providing the state of Connecticut with a copy of this proposed amendment to ensure their awareness of this request.

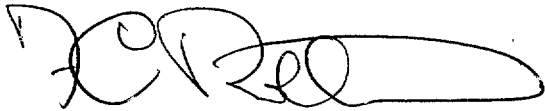
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If the you have any questions or comments regarding this submittal, please contact Mr. Bryan Ford at (860) 437-5895.

NNECO requests that the amendment become effective as of the date of issuance, to be implemented within 90 days of issuance.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



F. C. Rothen  
Vice President, Nuclear Work Services

Subscribed and sworn to before me

this 5 day of December, 2000

Donna Lynne Williams  
Notary Public

Date Commission Expires: Nov. 30, 2001

cc: H. J. Miller, Region I Administrator  
J. B. Hickman, NRC Senior Project Manager, Millstone Unit No. 1  
P. C. Cataldo, Resident Inspector

Director  
Bureau of Air Management  
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**Attachment 1 to B18247**

**Millstone Nuclear Power Station, Unit No. 1**

**Proposed Technical Specifications and Bases**

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## 1.0 USE AND APPLICATION

1.1 Definitions

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## -----NOTE-----

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

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TermDefinition

ACTIONS

ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.

1.0 USE AND APPLICATION

1.2 Completion Times

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PURPOSE The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

BACKGROUND Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring the safe storage of irradiated fuel. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Times(s).

DESCRIPTION The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a specified condition stated in the Applicability of the LCO. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

IMMEDIATE  
COMPLETION  
TIME When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.3 Frequency

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PURPOSE The purpose of this section is to define the proper use and application of Frequency requirements.

DESCRIPTION Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "Specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "Specified Frequency" consists of the requirements of the Frequency column of each SR.

1.0 USE AND APPLICATION

1.3 Frequency

EXAMPLE

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify parameter is within limits	7 days

This example contains the type of SR encountered in the Technical Specifications (TS). The Frequency specifies an interval (7 days) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 7 days, an extension of the time interval to 1.25 times the interval specified in the Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in the specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified, then SR 3.0.3 becomes applicable.



## 2.0 SAFETY LIMITS

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This section is not applicable since Millstone Unit 1 is permanently defueled.

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3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

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LCO 3.0.1 LCOs shall be met during the specified conditions in the Applicability, except as provided in LCO 3.0.2.

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LCO 3.0.2 Upon discovery of the failure to meet an LCO, the required actions of the associated Conditions shall be met.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the required action is not required unless otherwise stated.

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### 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

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- SR 3.0.1      SRs shall be met during specified conditions in the Applicability for individual LCOs unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on variables outside specified limits.
- 
- SR 3.0.2      The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the frequency is met.
- 
- SR 3.0.3      If it is discovered that a Surveillance was not performed within its specified frequency, then compliance with the requirement to declare the LCO not met may be delayed from the time of discovery up to 24 hours. This delay period is permitted to allow performance of the surveillance.
- If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met and the applicable Condition(s) must be entered.
- When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met and the applicable Condition(s) must be entered.
-

### 3.1 PLANT SYSTEMS

#### 3.1.1 Fuel Storage Pool Water Level

LCO 3.1.1 The Fuel Storage Pool Water Level shall be greater than or equal to 33 feet.

APPLICABILITY During movement of irradiated fuel assemblies in the Fuel Storage Pool.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel Storage Pool Water Level not within limit.	A.1 Suspend movement of irradiated fuel assemblies in the Fuel Storage Pool.	Immediately

#### SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.1.1 Verify the Fuel Storage Pool Water Level is greater than or equal to 33 feet.	7 days

## 4.0 DESIGN FEATURES

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4.1 Site Location      The Unit 1 Reactor Building is located on the site at Millstone Point in Waterford, Connecticut. The nearest site boundary on land is 2063 feet northeast of the reactor building which is the minimum distance to the boundary of the exclusion area as described in 10 CFR 100.3(a).

### 4.2 Fuel Storage

#### 4.2.1 Criticality

The fuel storage racks are designed and shall be maintained with:

- a.      Fuel assemblies having a maximum k-infinity of 1.24 in the normal reactor configuration at cold conditions, and an average U-235 enrichment of 3.8 weight percent or less; and
- b.       $K_{eff} \leq 0.95$ .

#### 4.2.2 Capacity

The fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 3229 bundles.

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

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- 5.1.1 The Designated Officer shall be responsible for overall operation of the Millstone Station Site and shall delegate, in writing, the succession to this responsibility during his absence. The Designated Manager shall be responsible for overall Unit safe operation and shall delegate, in writing, the succession of this responsibility during his absence.

The Designated Manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect the safe storage of irradiated fuel.

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## 5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

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5.2.1 Onsite And Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safe storage of irradiated fuel.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout the highest management levels, intermediate levels, and all organization positions accountable for the safe storage of irradiated fuel. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the plant specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Quality Assurance Topical Report;
- b. The Designated Manager shall be responsible for overall unit activities and shall have control over those onsite activities and resources necessary for maintenance and storage of irradiated fuel in a safe condition;
- c. The Designated Officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to ensure the safe storage of irradiated fuel; and
- d. The individuals who train the unit staff, who carry out radiation protection functions, or perform quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from unit activity pressures.

5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

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5.2.2 Facility Staff

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 5.2-1.
- b. At least one person qualified to stand watch in the control room shall be present in the control room when irradiated fuel is stored in the fuel storage pool.
- c. Deleted.
- d. An individual qualified in radiation protection procedures shall be onsite during fuel handling operations.
- e. All fuel handling operations shall be directly supervised by a qualified individual.
- f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform functions important to the safe storage of irradiated fuel assemblies (e.g., health physicists, non-certified operators, and key maintenance personnel).

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the above guidelines shall be authorized in advance by the designated manager or the designated manager designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.



5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

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5.2.2 Facility Staff (continued)

TABLE 5.2-1  
MINIMUM SHIFT CREW COMPOSITION (1)

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION
Certified Fuel Handler	1
Non-Certified Operator	1

- (1) The above shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided expeditious actions are taken to fill the required positions.

5.0 ADMINISTRATIVE CONTROLS

5.3 Facility Staff Qualifications

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5.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for:

5.3.1.1 The Operations Manager or Assistant Operations Manager shall be a certified fuel handler.

5.3.1.2 The Health Physics Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, Revision 1.

5.0 ADMINISTRATIVE CONTROLS

5.4 Training

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Deleted

5.0 ADMINISTRATIVE CONTROLS

5.5 Procedures

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5.5.1 Written procedures shall be established, implemented, and maintained covering the following activities:

- a. The procedures applicable to the safe storage of irradiated fuel recommended in Appendix "A" of Regulatory Guide 1.33, February 1978;
- b. The emergency plan;
- c. Quality assurance for radiological effluent and environmental monitoring;
- d. Fire Protection Program implementation;
- e. All programs specified in Specification 5.6.

5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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The following programs shall be established, implemented and maintained.

5.6.1 Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM)

- a. The REMODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The REMODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release, reports required by Specification 5.7.2 and Specification 5.7.3.
- c. Licensee initiated changes to the REMODCM:
  1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
    - i. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
    - ii. a determination that the change(s) will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a and Appendix I to 10 CFR 50, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
  2. Shall become effective after the approval of the designated officer; and

5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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5.6.1 Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM) (continued)

3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire REMODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the REMODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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5.6.2 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not involve either of the following:
  - 1. a change in the TS incorporated in the license; or
  - 2. a change to the updated DSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the DSAR.
- d. Proposed changes that meet the criteria of Specification 5.6.2b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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5.6.3 Fuel Storage Pool Program

This program provides controls to help assure that the spent fuel storage pool is maintained as described in the DSAR. The program shall include controls for monitoring and responding to the condition of the spent fuel storage pool.



5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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5.6.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the REMODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the REMODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 CFR 20, Appendix B, Table II, Column 2 (1993 version);
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the REMODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;
- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the REMODCM at least every 31 days;
- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

## 5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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5.6.4 Radioactive Effluent Controls Program (continued)

- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with 10 CFR 20, Appendix B, Table II, Column 1 (1993 version);
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

## 5.0 ADMINISTRATIVE CONTROLS

5.7 Reporting Requirements

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The following reports shall be submitted in accordance with 10 CFR 50.4.

5.7.1 Occupational Radiation Exposure Report

-----NOTE-----

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

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A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR Part 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), electronic dosimeter, or film badge measurements. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by March 1 of each year.

5.0 ADMINISTRATIVE CONTROLS

5.7 Reporting Requirements

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5.7.2 Annual Radiological Environmental Operating Report

-----NOTE-----  
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.  
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The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 1 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODOCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the REMODOCM, as well as summarized and tabulated results of these analyses and measurements. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in the next annual report.

## 5.0 ADMINISTRATIVE CONTROLS

5.7 Reporting Requirements

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5.7.3 Radioactive Effluent Release Report

-----NOTE-----  
A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.  
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The Radioactive Effluent Release Report covering the operation of the unit in the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the REMODCM and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

## 5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

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5.8 High Radiation Area

- 5.8.1 Pursuant to 10 CFR Part 20.1601(c), in lieu of the requirements of 10 CFR Part 20.1601(a), each high radiation area is defined in 10 CFR Part 20 shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a radiation work permit or equivalent. Individuals trained and qualified in radiation protection procedures (e.g., a health physics technician) or personnel continuously escorted by such individuals may be exempted from this RWP requirement while performing their assigned duties in high radiation areas where radiation doses could be received that are equal to or less than 1 rem in 1 hour (measured at 30 centimeters from any source of radiation) provided they are otherwise following plant radiation protection procedures, or a general radiation protection RWP, for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area,
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them,
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable RWP.

5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

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5.8 High Radiation Area (continued)

- 5.8.2 In addition to the requirements of Specification 5.8.1, areas that are accessible to personnel and that have radiation levels greater than 1.0 rem (but less than 500 rads at 1 meter) in 1 hour at 30 cm from the radiation source, or from any surface penetrated by the radiation, shall be provided with locked or continuously guarded doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the appropriate supervisor on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that specifies the dose rates in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of a stay time specification on the RWP, direct or remote continuous surveillance (such as closed circuit TV cameras) may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.
- 5.8.3 Individual high radiation areas that are accessible to personnel, that could result in radiation doses greater than 1.0 rem in 1 hour, and that are within large areas where no enclosure exists to enable locking and where no enclosure can be reasonably constructed around the individual area shall be barricaded and conspicuously posted. A flashing light shall be activated whenever the dose rate in such an area exceeds or is expected to exceed 1.0 rem in 1 hour at 30 cm from the radiation source or from any surface penetrated by the radiation.
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Technical Specifications  
Bases  
Millstone Nuclear Power Station

Millstone Unit 1  
Waterford, Connecticut

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## B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

### BASES

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LCOs LCO 3.0.1 and 3.0.2 establish general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

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LCO 3.0.1 LCO 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when the LCO is required to be met (i.e., when the facility is in the specified conditions of the Applicability statement of each specification).

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LCO 3.0.2 LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This specification establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

Completing the Required Actions is not required when an LCO is met or is no longer applicable, unless otherwise stated in the individual Specifications.

The Completion Times of the Required Actions are also applicable when a specified condition in the Applicability is entered intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise the safe storage of irradiated fuel. Intentional entry into ACTIONS should not be made for convenience.

## B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

### BASES

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SRs SR 3.0.1 through 3.0.3 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise specified.

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SR 3.0.1 SR 3.0.1 establishes the requirement that SRs must be met during the specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that surveillances are performed to verify that variables are within specified limits. Failure to meet a Surveillance within the specified Frequency, in accordance with SR 3.0.2, constitutes a failure to meet an LCO.

Surveillances do not have to be performed when the facility is in a specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified.

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SR 3.0.2 SR 3.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers facility conditions that may not be suitable for conducting the Surveillance (e.g., other ongoing Surveillance or maintenance activities).

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. Any exceptions to SR 3.0.2 are stated in the individual Specifications.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as a convenience to extend Surveillance intervals or periodic Completion Time intervals beyond those specified.

## B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

### BASES

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SR 3.0.3 SR 3.0.3 establishes the flexibility to defer declaring an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours applies from the point of time that it is discovered that the Surveillance has not been performed in accordance to SR 3.0.2, and not at the time that the specified Frequency was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with Required Actions or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of facility conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements.

Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by SR 3.0.3 is a flexibility which is not intended to be used as a convenience to extend Surveillance intervals.

If a Surveillance is not completed within the allowable delay period, then the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the Completion Time of the ACTIONS, restores compliance with SR 3.0.1.

B 3.1 DEFUELED SYSTEMS

B 3.1.1 Fuel Storage Pool Water Level

BASES

---

BACKGROUND      The minimum water level in the spent fuel storage pool meets the assumptions of iodine decontamination factors following a fuel handling accident. A general description of the spent fuel storage pool design is found in Chapter 3 of the DSAR, (Ref. 1). The assumptions of the fuel handling accident are found in Chapter 5 of the DSAR (Ref. 2).

---

APPLICABLE  
SAFETY  
ANALYSIS

Although the unit is permanently shutdown and defueled, fuel handling accidents in the fuel storage pool are still possible.

A bounding calculation of the radiological consequences of such an accident in the spent fuel pool was performed, based on the following:

- Actual source term - radioactive decay since shutdown credited
- Failure of four assemblies - 248 fuel rods in four 8 x 8 assemblies
- Unfiltered ground release - no credit for secondary containment or standby gas treatment

The analysis concluded that 1) calculated doses at the exclusion area boundary and the low population zone are within 10CFR100 limits; and 2) calculated doses to the operating units and Unit 1 Control Rooms are within the limits set in GDC-19.

BASES

---

LCO                      The fuel storage pool water level is required to be greater than or equal to 33 feet above the bottom of the pool. The bottom of the fuel storage pool is located at an elevation of 69 feet, 9 inches above mean sea level (MSL). Therefore, the 33 feet limit corresponds to an elevation of 102 feet, 9 inches above MSL.

                            This water level preserves the assumptions of the fuel handling accident analysis and provides shielding to minimize the general area dose when irradiated fuel is being moved.

---

APPLICABILITY        This LCO applies whenever movement of irradiated fuel assemblies occurs in the fuel storage pool since the potential for a release of fission products exists.

---

ACTIONS                A.1

                            When the initial conditions for an accident cannot be met, steps should be taken to preclude the accident from occurring. With fuel storage pool level less than required, the movement of irradiated fuel assemblies in the fuel storage pool is suspended immediately. Suspension of this activity shall not preclude completion of movement of an irradiated fuel assembly to a safe position. This effectively precludes a spent fuel handling accident from occurring.

BASES

---

SURVEILLANCE  
REQUIREMENTS

SR 3.1.1

This SR ensures that the water level is within the established limit. The water level in the fuel storage pool must be checked periodically. The 7 day Frequency is based on engineering judgement and is considered adequate because of available indication of level changes and the large volume of water in the pool. Water level changes are controlled by facility procedures and level changes are unlikely based on operating experience.

---

References

1. DSAR Chapter 3
2. DSAR Chapter 5

Attachment 2 to B18247

Millstone Nuclear Power Station, Unit No. 1

Annotated Current Technical Specifications and Bases  
Indicating Proposed Changes



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A.1

## 1.0 USE AND APPLICATION

### 1.1 Definitions

#### NOTE

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

#### Term

#### Definition

#### ACTIONS

ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.

A.2

#### CERTIFIED FUEL HANDLER

A CERTIFIED FUEL HANDLER is an individual who complies with provisions of the CERTIFIED FUEL HANDLER training program required by Technical Specification 5.4.1.

#### OPERABLE- OPERABILITY

A system, subsystem, division, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, division, component or device to perform its specified safety function(s) are also capable of performing their related support function(s).

A.3

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE

The purpose of this section is to explain the meaning of logical connectors.

Logical connectors are used in Technical Specifications (TS) to discriminate between, and yet connect, discrete Conditions, Required Actions, Completion Times, Surveillances, and Frequencies. The only logical connectors that appear in TS are AND and OR. The physical arrangement of these connectors constitutes logical conventions with specific meanings.

BACKGROUND

Several levels of logic may be used to state Required Actions. These levels are identified by the placement (or nesting) of the logical connectors and by the number assigned to each Required Action. The first level of logic is identified by the first digit of the number assigned to a Required Action and the placement of the logical connector in the first level of nesting (i.e., left justified with the number of the Required Action). The successive levels of logic are identified by additional digits of the Required Action number and by successive indentions of the logical connectors.

When logical connectors are used to state a Condition, Completion Time, Surveillance, or Frequency, only the first level of logic is used, and the logical connector is left justified with the statement of the Condition, Completion Time, Surveillance, or Frequency.

EXAMPLES

The following examples illustrate the use of logical connectors.

(continued)

A.3

# 1.0 USE AND APPLICATION

## 1.2 Logical Connectors

### EXAMPLES (continued)

#### EXAMPLE 1.2-1 ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Verify.....	
	<u>AND</u>	
	A.2 Restore.....	

In this example the logical connector AND is used to indicate that when in Condition A, both Required Actions A.1 and A.2 must be completed.

(continued)

A.3

## 1.0 USE AND APPLICATION

### 1.2 Logical Connectors

#### EXAMPLES (continued)

##### EXAMPLE 1.2-2

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Trip.....	
	<u>OR</u>	
	A.2.1 Verify.....	
	<u>AND</u>	
	A.2.2 Reduce	

This example represents a more complicated use of logical connectors. Required Actions A.1 and A.2 are alternative choices, only one of which must be performed as indicated by the use of the logical connector OR and the left justified placement. Either of the Actions may be chosen. If A.2 is chosen, then both A.2.1 and A.2.2 must be performed as indicated by the logical connector AND.

A.1

## 1.0 USE AND APPLICATION

### 1.0<sup>2</sup> Completion Times

**PURPOSE** The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

**BACKGROUND** Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring the safe storage of irradiated fuel. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Times(s).

**DESCRIPTION** The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

A.4

A.3

#### EXAMPLES

The following examples illustrate the use of Completion Times with different types of Conditions.

(continued)

A.1

## 1.0 USE AND APPLICATION

### 1.0<sup>(2)</sup> Completion Times

#### EXAMPLES (continued)

##### EXAMPLE 1.3-1

##### ACTIONS

A.3

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Required Action and associated Completion Time not met.	A.1 Verify....	6 hours
	AND A.2 Restore	36 hours

Condition A has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition A is entered. The Required Actions of Condition A are to perform the verification required by ACTION A.1 within 6 hours AND to perform the restoration required by ACTION A.2 within 36 hours. A total of 6 hours is allowed for performing ACTION A.1 and a total of 36 hours (not 42 hours) is allowed for performing ACTION A.2 from the time that Condition A was entered. If ACTION A.1 is completed within 3 hours, the time allowed completing ACTION A.2 is the next 33 hours because the total time allowed for completing ACTION A.2 is 36 hours.

#### IMMEDIATE COMPLETION TIME

When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

A.1

## 1.0 USE AND APPLICATION

1.4 <sup>3</sup> Frequency

## PURPOSE

The purpose of this section is to define the proper use and application of Frequency requirements.

## DESCRIPTION

Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "Specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "Specified Frequency" consists of the requirements of the Frequency column of each SR as well as certain Notes in the Surveillance column that modify performance requirements.

A.3

EXAMPLE <sup>3</sup>

The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is when irradiated fuel is stored in the fuel pool.

(continued)



A.1

## 1.0 USE AND APPLICATION

1.6 <sup>3</sup> Frequency

EXAMPLE (continued)

~~EXAMPLE 1.4-1~~

## SURVEILLANCE REQUIREMENTS

A.3 SURVEILLANCE	FREQUENCY
Verify parameter is within limits.	<sup>7 days</sup> <del>12 hours</del>

A.16

This Example ~~1.4-1~~ contains the type of SR ~~most often~~ encountered in the Technical Specifications (TS). The Frequency specifies an interval (<sup>7 days</sup>~~12 hours~~) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as ~~12 hours~~ <sup>7 days</sup>, an extension of the time interval to 1.25 times the interval specified in the Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in the specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified, then SR 3.0.3 becomes applicable.

A.16

A.3

A.16

(continued)

A.1

## 1.0 USE AND APPLICATION

## 1.4 Frequency

## EXAMPLES (continued)

EXAMPLE 1.4-2

## SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify parameter is within limits.	Within 24 hours prior to moving irradiated fuel
	<u>AND</u>
	24 hours thereafter.

Example 1.4-2 has two Frequencies. The first is a one time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. The use of "prior to" indicates that the surveillance must be performed once before the initiation of fuel handling activities. This type of Frequency does not qualify for the extension allowed by SR 3.0.2. "Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "prior to" performance in this example).

A.3

## 2.0 SAFETY LIMITS

---

This section is not applicable since Millstone Unit 1 is permanently defueled.

---

NOV -9 1999  
LCO Applicability  
3.0

### 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the specified conditions in the Applicability, except as provided in LCO 3.0.2.

LCO 3.0.2 Upon discovery of the failure to meet an LCO, the required actions of the associated Conditions shall be met.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the required action is not required unless otherwise stated.

A.5

---

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

---

SR 3.0.1 SRs shall be met during specific<sup>ed</sup> conditions in the Applicability for individual LCOs unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

A.6

SR 3.0.2 The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the frequency is met.

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified frequency, then compliance with the requirement to declare the LCO not met may be delayed from the time of discovery up to 24 hours or up to the limit of the specified frequency, whichever is less. This delay period is permitted to allow performance of the surveillance.

A.7

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met and the applicable Condition(s) must be entered. The Completion Times of the Required Actions begin immediately upon expiration of the delay period.

A.8

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met and the applicable Condition(s) must be entered. The Completion Times of the Required Actions begin immediately upon failure to meet the Surveillance.

A.17

PLANT

3.1 DEFUELED SYSTEMS

3.1.1 Fuel Storage Pool Water Level

LCO 3.1.1 The Fuel Storage Pool Water Level shall be greater than or equal to 33 feet.

L.1

APPLICABILITY *During movement of irradiated fuel assemblies*  
~~Whenever irradiated fuel is stored~~ in the Fuel Storage Pool.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Fuel Storage Pool Water Level not within limit.	A.1 <del>Suspend all Fuel Handling Operations.</del>	Immediately <i>L.1</i> <i>&lt;insert from next page&gt;</i>
<i>L.1</i>	<del>AND</del> A.2 Restore Fuel Storage Pool Water Level to within limits.	<del>Immediately</del>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.1.1 Verify the Fuel Storage Pool Water Level is greater than or equal to 33 feet.	<del>24 hours</del> <i>7 days</i> <i>L.8</i>
<i>L.A.1</i> <del>AND</del> Record the Fuel Storage Pool Water Level.	

*Insert to CTS page 3.2-1*

movement of irradiated fuel assemblies in the Fuel Storage Pool.

R.1

3.2 SPENT FUEL HANDLING

3.2.1 Reactor Building Crane Operability

LCO 3.2.1 The Reactor Building crane shall be OPERABLE.

APPLICABILITY When the Reactor Building crane is used for handling of a spent fuel cask.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Reactor Building crane is INOPERABLE.	A.1 Suspend all Spent Fuel Cask handling and place the load in a safe condition.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.2.1 Conduct a visual inspection of crane cables, sheaves, hook, yoke, and cask lifting trunnions. Conduct no-load mechanical and electrical tests to verify proper operation of crane controls, brakes, and lifting speeds. Conduct a load test by lifting the empty cask out of the pivot cradle. The above inspections and pre-lifting procedure shall meet the requirements of ANSI Standard B30.2, 1967.	Within 4 days prior to Spent Fuel Cask handling operations and every 4 days thereafter during spent fuel cask handling



R.1

## 3.2 SPENT FUEL HANDLING

## 3.2.2 Reactor Building Crane Travel with a Spent Fuel Cask

## LCO 3.2.2

The Reactor Building crane loaded with a Spent Fuel Cask shall be prohibited from travel over irradiated fuel assemblies. The Reactor Building crane mode switch shall be in a "Mode 2" position and the mode switch key removed.

## APPLICABILITY

When the Reactor Building crane is used for handling of a spent fuel cask.

## ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Reactor Building Crane mode switch not in "Mode 2" position and mode switch key not removed.	A.1 Suspend all Spent Fuel Cask handling and place the load in a safe condition.	Immediately

## SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.2.2 Demonstrate OPERABILITY of Reactor Building crane interlocks and limit switches which prevent crane travel over irradiated fuel assemblies.	<p>Within 7 days prior to Spent Fuel Cask handling operations</p> <p>Every 7 days thereafter during Spent Fuel Cask handling</p>

## 4.0 DESIGN FEATURES

- 4.1 Site Location      The Unit 1 Reactor Building is located on the site at Millstone Point in Waterford, Connecticut. The nearest site boundary on land is 2063 feet northeast of the reactor building (~~1620 feet northeast of the elevated stack~~) which is the minimum distance to the boundary of the exclusion area as described in 10CFR100.3(a). ~~No part of the site that is closer to the reactor building than 2063 feet shall be sold or leased except to The Connecticut Light and Power Company, Western Massachusetts Electric Company or the Northeast Nuclear Energy Company or their corporate affiliates for use in conjunction with normal utility operations.~~

A.12

L.2

## 4.2 Fuel Storage

- L.3 4.2.1 The new fuel storage facility shall be such that the  $K_{eff}$  dry is less than 0.90 and flooded is less than 0.95.

4.2.1.b

L.9

4.2.1.a

A.9

- 4.2.2 The  $K_{eff}$  of the spent fuel storage pool shall be less than or equal to ~~0.95~~ ~~0.90~~. This  $K_{eff}$  value is satisfied with fuel assemblies having a maximum k-infinity of 1.24 in the normal reactor configuration at cold conditions, and an average U-235 enrichment of 3.8 weight percent or less.

4.2.3

- 4.2.3 The number of fuel assemblies stored in the spent fuel storage pool shall not exceed 3229 bundles.

< insert from next page >

4.2.1      Criticality

The fuel storage racks are designed and shall be maintained with:

A.9      a.      Fuel assemblies having a maximum k-infinity of 1.24 in the normal reactor configuration at cold conditions, and an average U-235 enrichment of 3.8 weight percent or less; and

L.9      b.       $K_{eff} \leq 0.95$ .

4.2.2      Capacity

A.9      The fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 3229 bundles.

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

during his absence

M.4

5.1.1 The Designated Officer shall be responsible for overall operation of the Millstone Station Site and shall delegate, in writing, the succession to this responsibility. The Designated Manager shall be responsible for overall Unit safe operation and shall delegate, in writing, the succession of this responsibility.

during his absence

M.4

5.1.2 The Shift Manager shall be responsible for the control room command function.

L.4

5.1.3 Unless otherwise defined, the technical specification titles for members of the staff are generic titles. Unit-specific titles for the functions and responsibilities associated with these generic titles are identified in the Quality Assurance Topical Report.

A.18

The Designated Manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect the safe storage of irradiated fuel.

M.4

## 5.0 ADMINISTRATIVE CONTROLS

### 5.2 Organization

#### 5.2.1 Onsite And Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safe storage of irradiated fuel.

*< insert from next page >*

A.19

- a. ~~Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions or in equivalent forms of documentation. These requirements shall be documented in the Quality Assurance Topical Report.~~

A.1

A.10

- b. The Designated Manager shall be responsible for overall unit ~~safe operation~~ and shall have control over those onsite activities and resources necessary for maintenance and storage of irradiated fuel in a safe condition. *(activities)*

A.1

- c. The Designated Officer shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to ensure the safe storage of irradiated fuel. *(; and unit staff)*

A.1

M.1

- d. The individuals who train the ~~CERTIFIED FUEL HANDLERS~~ and those who carry out radiation protection functions or perform quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their ~~ability to perform their assigned functions~~. *(independence from unit activity pressures.)*

A.10

(continued)

- a. Lines of authority, responsibility, and communication shall be defined and established throughout the highest management levels through intermediate levels, and all organization positions accountable for the safe storage of irradiated fuel. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the plant specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Quality Assurance Topical Report;

A.1

A.18

## 5.0 ADMINISTRATIVE CONTROLS

### 5.2 Organization

---

#### 5.2.2 Facility Staff

- a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 5.2-1.
- b. At least one person qualified to stand watch in the control room shall be present in the control room when irradiated fuel is stored in the fuel storage pool.
- c. Deleted
- d. An individual qualified in radiation protection procedures shall be onsite during fuel handling operations.
- e. All fuel handling operations shall be directly supervised by a qualified individual.
- f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform functions important to the safe storage of irradiated fuel assemblies. These procedures should follow the general guidance of the NRC Policy Statement on working hours (Generic Letter No. 82-12).
- g. The Shift Manager shall be a CERTIFIED FUEL HANDLER.

A.11

L.4

A.11

<insert from next page>

(continued)

(e.g., health physicists, non-certified operators, and key maintenance personnel).

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the above guidelines shall be authorized in advance by the designated manager or the designated manager designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.



5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

---

5.2.2 Facility Staff (continued)

TABLE 5.2-1  
MINIMUM SHIFT CREW COMPOSITION (1)

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION
Certified Fuel Handler	1
Non-Certified Operator	1

- (1) The above shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided expeditious actions are taken to fill the required positions.
-

5.0 ADMINISTRATIVE CONTROLS

5.3 Facility Staff Qualifications

---

5.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for:

5.3.1.1 The Operations Manager or Assistant Operations Manager shall be a CERTIFIED FUEL HANDLER.

5.3.1.2 The Health Physics Manager shall meet or exceed the qualifications of Regulatory Guide 1.8, Revision 1.

---

Deleted

5.0 ADMINISTRATIVE CONTROLS

5.4 Training

5.4.1 An NRC approved training and retraining program for the CERTIFIED FUEL HANDLERS shall be maintained.

L.10

## 5.0 ADMINISTRATIVE CONTROLS

A.1

## 5.5 Procedures

5.5.1 Written procedures shall be established, implemented, and maintained covering the following activities:

a. The procedures applicable to the safe storage of irradiated fuel recommended in Appendix "A" of Regulatory Guide 1.33, February 1978;

M.2

~~b. The emergency plan;~~

~~d. Fire Protection Program implementation;~~

A.13

~~c. Cold Weather Operations;~~

~~e. Quality assurance for radiological effluent and environmental monitoring;~~

A.14

~~e. Liquid and gaseous radioactive effluent discharges from the unit for all operations involving offsite releases of radioactive effluents. These procedures shall specify the use of appropriate waste treatment utilizing the guidance provided in the REMODCM;~~

A.15

~~f. Fuel handling operations;~~

~~g. All programs specified in Specification 5.6.~~

LA.3

5.5.2 The Designated Manager, Designated Officer, or Designated Senior Officer may designate specific procedures and programs, or classes of procedures and programs to be reviewed in accordance with the Station Qualified Reviewer Program in lieu of review by the PORC or SORC. The review per the PORC, SORC, or Station Qualified Reviewer Program shall be in accordance with Northeast Utilities Quality Assurance Program (NUQAP).

5.5.3 Procedures listed in Specification 5.5, and changes thereto, shall be approved by the Designated Manager, or Designated Officer or by cognizant managers or directors who are designated as the Approval Authority by the Designated Manager, or Designated Officer as specified in administrative procedures. The Approval Authority for each procedure and program or class of procedure and program shall be specified in administrative procedures.

(continued)

5.0 ADMINISTRATIVE CONTROLS

LA3

5.5 Procedures (continued)

- 5.5.4 Each procedure of Specification 5.5.1, and changes thereto, shall be reviewed by the PORC or SORC and shall be approved by the Designated Manager or Designated Officer, or be reviewed and approved in accordance with the Station Qualified Reviewer Program prior to implementation. Each procedure of Specification 5.5.1 shall be reviewed periodically as set forth in administrative procedures.
- 5.5.5 Temporary changes to procedures of Specification 5.5.1 above may be made provided:
- the intent of the original procedure is not altered;
  - the change is approved by two members of the plant management staff, at least one of whom is a CERTIFIED FUEL HANDLER;
  - the change is documented, reviewed by the PORC or SORC, or the Station Qualified Reviewer Program, as applicable, and approved by the Designated Manager, Designated Officer, or the Station Qualified Reviewer Program Department Manager within 14 days of implementation.
- 5.5.6 All procedures and procedure changes required for the Radiological Environmental Monitoring Program of Specification 5.6.1 shall be reviewed by an individual (other than the author) from the Radiological Assessment Branch or the Production Operation Services Laboratory (POSL) and approved by appropriate supervision.
- 5.5.7 Temporary changes may be made for the Radiological Environmental Monitoring Program provided the intent of the original procedure is not altered and the change is documented and reviewed by an individual (other than the author) from the Radiological Assessment Branch or the POSL, within 14 days of implementation.

5.0 ADMINISTRATIVE CONTROLS

A.1

5.6 Programs and Manuals

The following programs shall be established, implemented and maintained.

5.6.1 Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODOCM)

- a. The REMODOCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The REMODOCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Operating, and Radioactive Effluent Release, reports required by Specification 5.7.2 and Specification 5.7.3.

(c) Licensee initiated changes to the REMODOCM:

- (1) (a) Shall be documented and records of reviews performed shall be retained. This documentation shall contain:

(i) ~~1~~ <sup>1</sup> sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and

(ii) ~~2~~ <sup>2</sup> a determination that the change(s) will maintain the level of radioactive effluent control required by 10CFR20.1302, 40CFR Part 190, 10 CFR 50.36a and Appendix I to 10CFR50, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;

- (2) (b) Shall become effective after review and acceptance by SORC and the approval of the designated officer; and

LA.4

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

A.1

5.6 Programs and Manuals

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5.6.1 Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODCM)  
(continued)

- ③ ② Shall be submitted to the Commission in the form of a complete, legible copy of the entire REMODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the REMODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

5.6 Programs and Manuals

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## 5.6.2 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not involve either of the following:
  1. a change in the TS incorporated in the license; or
  2. a change to the updated <sup>(D)</sup>FSAR or Bases that involves an unreviewed safety question as defined in 10CFR50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the <sup>(D)</sup>FSAR.
- d. Proposed changes that meet the criteria of Specification 5.6.2b above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10CFR50.71(e).

(continued)



## 5.0 ADMINISTRATIVE CONTROLS

## 5.6 Programs and Manuals

5.6.3 Fuel Storage Pool ~~(Water Chemistry)~~ Program

M,3

LA.5

This program provides controls for monitoring fuel storage pool water chemistry to minimize the potential effects of corrosion which could affect the safe storage of irradiated fuel. The program shall include identification for critical variables and control points for these variables. The program shall include sampling frequencies and define corrective actions to be taken for off control point chemistry conditions. The NRC will be notified prior to elimination or changes to the acceptance criteria for critical variables monitored.

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M,3

This program provides controls to help assure that the spent fuel storage pool is maintained as described in the DSAR. The program shall include controls for monitoring and responding to the condition of the spent fuel storage pool.

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

### 5.6 Programs and Manuals

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#### 5.6.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the REMODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the REMODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 CFR 20, Appendix B, Table II, Column 2 (1993 version);
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the REMODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;
- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the REMODCM at least every 31 days;
- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

### 5.6 Programs and Manuals

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#### 5.6.4 Radioactive Effluent Controls Program (continued)

- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with 10 CFR 20, Appendix B, Table II, Column 1 (1993 version);
  - h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
  - i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
  - j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.
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## 5.0 ADMINISTRATIVE CONTROLS

### 5.7 Reporting Requirements

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The following reports shall be submitted in accordance with 10CFR50.4.

#### 5.7.1 Occupational Radiation Exposure Report

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##### NOTE

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A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

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A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10CFR Part 20.2206. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions. The report shall be submitted by March 1 of each year.

L. 7

electronic dosimeters

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 Reporting Requirements

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5.7.2 Annual Radiological Environmental Operating Report

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NOTE

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A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

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The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 1 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Radiological Effluent Monitoring and Offsite Dose Calculation Manual (REMODOCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the REMODOCM, as well as summarized and tabulated results of these analyses and measurements. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in the next annual report.

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

### 5.7 Reporting Requirements

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#### 5.7.3 Radioactive Effluent Release Report

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##### NOTE

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

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The Radioactive Effluent Release Report covering the operation of the unit in the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the REMODCM and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1.

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## 5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

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5.8 High Radiation Area

- 5.8.1 Pursuant to 10CFR Part 20.1601(c), in lieu of the requirements of 10CFR Part 20.1601(a), each high radiation area as defined in 10 CFR Part 20 shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a radiation work permit or equivalent. Individuals trained and qualified in radiation protection procedures (e.g., a health physics technician) or personnel continuously escorted by such individuals may be exempted from this RWP requirement while performing their assigned duties in high radiation areas where radiation doses could be received that are equal to or less than 1 rem in 1 hour (measured at 30 centimeters from any source of radiation) provided they are otherwise following plant radiation protection procedures, or a general radiation protection RWP, for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area,
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rates in the area have been determined and personnel have been made knowledgeable of them,
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device. This individual is responsible for providing positive radiation protection control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation protection procedures or the applicable RWP.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

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5.8 High Radiation Area (continued)

- 5.8.2 In addition to the requirements of Specification 5.8.1, areas that are accessible to personnel and that have radiation levels greater than 1.0 rem (but less than 500 rads at 1 meter) in 1 hour at 30 cm from the radiation source, or from any surface penetrated by the radiation, shall be provided with locked or continuously guarded doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the appropriate supervisor on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that specifies the dose rates in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of a stay time specification on the RWP, direct or remote continuous surveillance (such as closed circuit TV cameras) may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.
- 5.8.3 Individual high radiation areas that are accessible to personnel, that could result in radiation doses greater than 1.0 rem in 1 hour, and that are within large areas where no enclosure exists to enable locking and where no enclosure can be reasonably constructed around the individual area shall be barricaded and conspicuously posted. A flashing light shall be activated whenever the dose rate in such an area exceeds or is expected to exceed 1.0 rem in 1 hour at 30 cm from the radiation source or from any surface penetrated by the radiation.
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**Technical Specifications  
Bases  
Millstone Nuclear Power Station**

**Millstone Unit 1  
Waterford, Connecticut**

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B.4

**B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY****BASES**

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LCOs	LCO 3.0.1 and 3.0.2 establish general requirements applicable to all Specifications and apply at all times, unless otherwise stated.
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LCO 3.0.1	LCO 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when the LCO is required to be met (i.e., when the facility is in the specified conditions of the Applicability statement of each specification).
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LCO 3.0.2	LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This specification establishes that:
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- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

Completing the Required Actions is not required when an LCO is met or is no longer applicable, unless otherwise stated in the individual Specifications.

The Completion Times of the Required Actions are also applicable when a specified condition in the Applicability is entered intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise the safe storage of irradiated fuel. Intentional entry into ACTIONS should not be made for convenience.

## B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

### BASES

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SRs SR 3.0.1 through 3.0.3 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise specified.

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SR 3.0.1 SR 3.0.1 establishes the requirement that SRs must be met during the specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that surveillances are performed to verify that variables are within specified limits. Failure to meet a Surveillance within the specified Frequency, in accordance with SR 3.0.2, constitutes a failure to meet an LCO.

Surveillances do not have to be performed when the facility is in a specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified.

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SR 3.0.2 SR 3.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers facility conditions that may not be suitable for conducting the Surveillance (e.g., other ongoing Surveillance or maintenance activities).

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. Any exceptions to SR 3.0.2 are stated in the individual Specifications.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as a convenience to extend Surveillance intervals or periodic Completion Time intervals beyond those specified.

(continued)

**B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY****BASES**

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**SR 3.0.3** SR 3.0.3 establishes the flexibility to defer declaring an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours applies from the point of time that it is discovered that the Surveillance has not been performed in accordance to SR 3.0.2, and not at the time that the specified Frequency was not met.

This delay period provides adequate time to complete Surveillances that have been missed. This delay period permits the completion of a Surveillance before complying with Required Actions or other remedial measures that might preclude completion of the Surveillance.

The basis for this delay period includes consideration of facility conditions, adequate planning, availability of personnel, the time required to perform the Surveillance, the safety significance of the delay in completing the required Surveillance, and the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the requirements. When a Surveillance with a Frequency based not on time intervals, but upon specified facility conditions or operational situations, is discovered not to have been performed when specified, SR 3.0.3 allows the full delay period of 24 hours to perform the Surveillance.

B.1

Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by SR 3.0.3. is a flexibility which is not intended to be used as a convenience to extend Surveillance intervals.

(continued)

## B 3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

### BASES

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#### SR 3.0.3 (continued)

If a Surveillance is not completed within the allowable delay period, then the variable is considered outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon expiration of the delay period. If a Surveillance is failed within the delay period, then the variable is outside the specified limits and the Completion Times of the Required Actions for the applicable LCO Conditions begin immediately upon failure of the Surveillance.

Completion of the Surveillance within the delay period allowed by this Specification, or within the Completion Time of the ACTIONS, restores compliance with SR 3.0.1.

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## B 3.1 DEFUELED SYSTEMS

### B 3.1.1 Fuel Storage Pool Water Level

#### BASES

**BACKGROUND** The minimum water level in the spent fuel storage pool meets the assumptions of iodine decontamination factors following a fuel handling accident. A general description of the spent fuel storage pool design is found in Chapter 3 of the DSAR, (Ref. 1). The assumptions of the fuel handling accident are found in Chapter 5 of the DSAR (Ref. 2).

**APPLICABLE SAFETY ANALYSIS** Although the unit is permanently shutdown and defueled, fuel handling accidents in the fuel storage pool are still possible.

A bounding calculation of the radiological consequences of such an accident in the spent fuel pool was performed, based on the following:

- Actual source term - radioactive decay since shutdown credited
- Failure of four assemblies - 248 fuel rods in four 8 x 8 assemblies
- Unfiltered ground release - no credit for secondary containment or standby gas treatment

The analysis concluded that 1) calculated doses at the exclusion area boundary and the low population zone are within 10CFR100 limits; and 2) calculated doses to the operating units and Unit 1 Control Rooms are within the limits set in GDC-19.

(continued)

## BASES

### LCO

The fuel storage pool water level is required to be greater than or equal to 33 feet above the bottom of the pool. The bottom of the fuel storage pool is located at an elevation of 69 feet, 9 inches above mean sea level (MSL). Therefore, the 33 feet limit corresponds to an elevation of 102 feet, 9 inches above MSL.

This water level preserves the assumptions of the fuel handling accident analysis and provides shielding to minimize the general area dose when irradiated fuel is being moved.

### APPLICABILITY

This LCO applies whenever <sup>movement of</sup> irradiated fuel assemblies <sup>are stored in</sup> the fuel storage pool. <sup>occurs in the fuel storage pool since the potential for a release of fission products exist.</sup>

B.2

### ACTIONS

#### A.1

When the initial conditions for an accident cannot be met, <sup>steps</sup> ~~action~~ <sup>with</sup> should be taken to preclude the accident from occurring. <sup>When</sup> the fuel storage pool level <sup>is lower</sup> than <sup>the</sup> required <sup>level, fuel handling</sup> activities should be suspended immediately. This does not preclude movement of items to a safe position.

B.3

the movement of irradiated fuel assemblies is

Suspension of this activity shall not preclude completion of movement of an irradiated fuel assembly to a safe position.

Fuel handling activities as described in this specification include the movement of spent fuel, or other loads suspended from the fuel building crane or refueling machine, over irradiated fuel assemblies.

B.3

This effectively precludes a <sup>spent</sup> fuel handling accident from occurring.

#### A.2

This action is intended to restore the fuel storage pool level as soon as possible to minimize the time that the water level assumed in the accident analysis is not being met.

(continued)



BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.1.1

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B,5

This SR ensures that the water level is within the established limit. The water level in the fuel storage pool must be checked periodically. The ~~24 hour~~ Frequency is based on engineering judgement and is considered adequate because of available indication of level changes and the large volume of water in the pool. Water level changes are controlled by facility procedures and level changes are unlikely based on operating experience.

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References

1. DSAR Chapter 3
2. DSAR Chapter 5

B 3.2 SPENT FUEL HANDLING

B.4

B 3.2.1 Reactor Building Crane Operability

BASES

**BACKGROUND**

The purpose of this specification is to preclude the possibility of dropping a spent fuel cask over irradiated fuel in the fuel storage pool.

A description of the Reactor Building crane design improvements was provided by NNECO to the NRC on June 29, 1973. The modification improvements were described as a "Cask Drop Prevention System." By letter dated December 30, 1975, the NRC informed NNECO that the proposed improvements were acceptable. However, the NRC also requested NNECO to submit proposed Technical Specifications to assure safe operation and continued surveillance of the Reactor Building crane. NNECO submitted the proposed Technical Specifications on April 1, 1976, and the NRC approved new Technical Specifications, including the "Crane Operability" LCO, as Amendment 27 to License No. DPR-21.

**APPLICABLE  
SAFETY  
ANALYSIS**

The "Cask Drop Prevention System" utilizes a redundant hoist system rated at 110 tons for the main hoist. This redundant system ensures that a load will not be dropped for all postulated credible single-component failures. The range of component failure examined extends over the total load path from the cask trunnions through the cask lifting yoke and redundant hoist system to the crane bridge structure. In addition, once the crane is set into the cask handling mode, its travel over the fuel pool will be limited to the cask storage area of the spent fuel pool. The operability requirements of the Reactor Building crane ensure that all redundant features of the crane have been adequately inspected.

Spent fuel cask drop over irradiated fuel in the fuel storage pool is precluded by these features as well as the features described in LCO and Surveillance Requirement 3.2.2 of these Technical Specifications.

(continued)

## B 3.2 SPENT FUEL HANDLING

B.4

## B 3.2.1 Reactor Building Crane Operability

## BASES

## LCO

The Reactor Building crane is required to be OPERABLE. The operability is established by:

- a visual inspection of the crane cables, sheaves, hook, yoke, and cask lifting trunnions,
- conducting no-load mechanical and electrical tests to verify proper operation of crane controls, brakes and lifting speeds,
- conducting a load test by lifting an empty cask out of the pivot cradle.

Maintaining the Reactor Building crane OPERABLE preserves the assumption of preventing a cask drop accident.

## APPLICABILITY

This LCO applies whenever the Reactor Building crane is used for handling of a spent fuel cask.

## ACTIONS

A.1

When the operability requirements for the Reactor Building crane cannot be met, steps should be taken to preclude a Spent Fuel Cask drop accident from occurring. Fuel cask handling activities should be suspended immediately and the load placed in a safe condition. This will effectively preclude a spent fuel cask drop accident from occurring.

SURVEILLANCE  
REQUIREMENTSSR 3.2.1

This SR verifies operability of the Reactor Building crane and ensures that the redundant features of the crane have been adequately inspected. The redundant hoist system ensures that a load will not be dropped for all postulated credible single-component failures. The Frequency is appropriate because operability is required to be established before Spent Fuel Cask handling operations commence.

(continued)

## B 3.2 SPENT FUEL HANDLING

B.4

## B 3.2.2 Reactor Building Crane Travel with a Spent Fuel Cask

## BASES

## BACKGROUND

The purpose of this specification is to preclude the possibility of dropping a spent fuel cask over irradiated fuel in the fuel storage pool. The Reactor Building crane has a 2-position mode switch which is designed to restrict crane motion, when in "Mode 2," as follows:

- It prevents a spent fuel cask height above the refueling floor not greater than 6 inches, and
- It establishes a predetermined path which specifically excludes the area above irradiated fuel by interlocks and limit switches.

This specification, in conjunction with LCO 3.2.1, ensures that a fuel cask drop over irradiated fuel in the fuel storage pool is prevented from occurring.

APPLICABLE  
SAFETY  
ANALYSIS

The "Cask Drop Prevention System" features a single-failure proof design that prevents a spent fuel cask drop over the fuel storage pool with resultant damage to irradiated fuel and/or plant equipment and structures. Once the Reactor Building crane mode switch is set into the cask handling mode, its travel over the fuel storage pool will be limited to the cask storage area of the fuel pool. This design feature as well as associated crane interlocks and limit switches ensure that a spent fuel cask drop will not occur over the irradiated fuel in the fuel storage pool.

An event initiated by a spent fuel cask drop over the irradiated fuel in the fuel storage pool is precluded by these features as well as the features described in LCO and Surveillance Requirement 3.2.1 of these Technical Specifications.

(continued)

B 3.2 SPENT FUEL HANDLING

B.4

B 3.2.2 Reactor Building Crane Travel with a Spent Fuel Cask

BASES

LCO

The Reactor Building crane mode switch is required to be in the "Mode 2" position with its key removed. This mode switch position is an engineered control which restricts crane travel to a path which excludes the area above the irradiated fuel in the fuel storage pool. Also, the height of a spent fuel cask loaded on the crane is restricted to a height of no greater than 6 inches above the refueling floor.

Maintaining the Reactor Building crane mode switch, associated crane limit switches, and interlocks preserves the assumption of preventing a cask drop accident.

APPLICABILITY

This LCO applies whenever the Reactor Building crane is used for handling of a spent fuel cask.

ACTIONS

A.1

When mode switch requirements for the Reactor Building crane cannot be met, steps should be taken to preclude a spent fuel cask drop accident from occurring. Fuel cask handling activities should be suspended immediately and the load placed in a safe condition. This will effectively preclude a spent fuel cask drop accident from occurring.

SURVEILLANCE  
REQUIREMENTS

SR 3.2.2

This SR demonstrates operability of the Reactor Building crane interlocks and limit switches which restricts the height of the crane load (i.e., the spent fuel cask bottom) to no more than 6 inches above the refueling floor and restricts crane path from traveling over the irradiated fuel assemblies. The Frequency is appropriate because operability is established before spent fuel cask handling operations start and operability is periodically assured during spent fuel cask handling.

Attachment 3 to B18247

Millstone Nuclear Power Station, Unit No. 1

Discussion of Proposed Changes to  
Technical Specifications and Bases

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

#### Administrative Changes

- A.1 These changes are reformatting and renumbering. As a result, the Technical Specifications (TS) should be more readily readable, and therefore understandable, by plant operators as well as other users. The reformatting, renumbering, and rewording process involves no technical changes to existing Technical Specifications.
- Editorial rewording, (either adding or deleting) is made to adopt certain wording preferences or English language conventions which resulted in no technical changes (either actual or interpretational) to the TS.
- A.2 The definitions of CERTIFIED FUEL HANDLER and OPERABLE-OPERABILITY have been deleted, because they are no longer used in the TS in a manner which requires a definition. For a discussion of the technical basis for the changes associated with these terms, see the associated specifications (CTS Chapter 5 and Chapter 3, respectively.)
- A.3 Current Technical Specification (CTS) Section 1.2, "Logical Connectors," and portions of CTS Sections 1.3 and 1.4 have been deleted because they are no longer used in the TS. For a discussion of the technical basis for the reformatting that resulted in ending their usage, see the associated specifications (CTS Sections 3.1 and 3.2.) Removing these details of Use and Application do not affect the TS content because they provide guidance about usage that is no longer used in the TS.
- A.4 The term "MODE" is not utilized in the Millstone Unit 1 Technical Specifications. This change corrects the specification by removing the term from the DESCRIPTION subsection of CTS section 1.3.
- A.5 A typographical error in CTS SR 3.0.1 is corrected to reflect the standard wording of NUREG-1433. The word "specific" is replaced with the standard term "specified." This change is merely an editorial change to ensure consistency with the industry standard SR Applicability rules to the extent possible while remaining consistent with the permanently shutdown and defueled condition of the facility.
- A.6 The proposed specifications do not include LCOs or SRs that are directed at ensuring any specific equipment operability. CTS 3.2.1 and 3.2.2 are proposed for relocation to plant controlled documents. With this change, there is no longer a need to include discussions related to equipment operability or inoperability. Therefore this part of CTS SR 3.0.1 has been proposed for deletion. For additional details and justification for removal of CTS 3.2.1 and 3.2.2, see the associated discussions of change.
- A.7 The proposed TS include only one SR. SR 3.1.1 is required to be completed once every 7 days. Therefore, the alternative limit on delayed declaration of failure to meet the associated LCO is no longer needed and is deleted.
- A.8 Portions of CTS 3.0.3 that are not consistent with NUREG-1433 have been deleted. This change does not affect the way the TS are met or the limits placed on the unit. This change is merely an editorial change to ensure consistency with the industry standard SR Applicability rules to the extent possible while remaining consistent with the permanently shutdown and defueled condition of the facility.

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

- A.9 CTS 4.2.2 and 4.2.3 are reformatted consistent with the proposed BWR permanently shutdown and defueled standard TS. No changes in the applicable limits are proposed.
- A.10 CTS 5.2.1, "Onsite and Offsite Organizations," has been revised to be consistent with the proposed BWR permanently shutdown and defueled standard TS. The term "safe operation" was changed to "activities" to more appropriately reflect the site condition. In addition, the TS has been clarified to ensure that training, radiation protection, and quality assurance functions are performed by individuals with appropriate independence from unit activity pressures.
- A.11 CTS 5.2.2f requires that procedures be developed and implemented that limit working hours of the unit staff consistent with "the general guidance of the NRC Policy Statement on working hours (Generic Letter No. 82-12)." This requirement is changed to explicitly include the applicable guidance from Generic Letter 82-12. No substantive change is proposed, this change is classified as administrative. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- A.12 Section 4.1, "Site Location" includes a description of the distance from the elevated stack to the nearest site boundary which will no longer be of significance to Millstone Unit 1. As part of the decommissioning of the facility, separation of systems shared between the permanently shutdown unit and the two remaining operating units is planned. The relocation of gaseous discharges from Unit 1 to alternative locations is being conducted in accordance with 10 CFR 50.59. The elevated stack will be retained as a gaseous discharge point for the operating units, however alternative discharge points are planned for use by Unit 1. With the termination of flow from Unit 1 to the elevated stack, including its location in the specification is no longer appropriate. This change is considered administrative in nature because it removes purely descriptive information that does not effect the way the plant is operated or maintained and the descriptive information will no longer be of applicability to the unit.
- A.13 The CTS 5.5.1.c requirement for written procedures to address "Cold Weather Operations" has been deleted. Operations procedures are required by CTS 5.5.1.a and proposed TS 5.5.1.a, which require the establishment, implementation, and maintenance of procedures applicable to the safe storage of irradiated fuel recommended in Appendix "A" of Regulatory Guide 1.33, February 1978. Since "Cold Weather Operations" are merely a subset of the procedures required by Reg. Guide 1.33, thus there is no reason to maintain a separate restatement of this requirement. No change to plant operations or equipment is required by this change, because it is merely removal of a redundant requirement. It has been classified as an administrative change. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.



**Discussion of Changes**  
**Millstone Station Unit No. 1 Technical Specifications**

- A.14 CTS 5.5.1.e requires that procedures be established, implemented, and maintained covering the discharge of liquid and gaseous radioactive effluents. CTS requirement 5.5.1.g and proposed requirement 5.5.1.e require procedures be established, implemented, and maintained covering activities described in the programs required by CTS Specification 5.6 (proposed TS 5.5). Since CTS Specification 5.6 and proposed Specification 5.5 describe the REMODCM program with governs the activities related to the discharge of liquid and gaseous radioactive effluents, the requirement of CTS 5.5.1.e is redundant to the requirement of CTS 5.5.1.g and proposed TS 5.5.1.e. Therefore, removing CTS 5.5.1.e will not affect the requirements of the specification, however it will simplify and clarify the specifications. Based on this, the removal of CTS 5.5.1.e has been classified as an administrative change that will not affect the operation of the facility or limits established by the Technical Specifications. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- A.15 The CTS 5.5.1.e requirement for written procedures to address "Fuel Handling Operations" has been deleted. Operations procedures are required by CTS 5.5.1.a and proposed TS 5.5.1.a, which require the establishment, implementation, and maintenance of procedures applicable to the safe storage of irradiated fuel recommended in Appendix "A" of Regulatory Guide 1.33, February 1978. "Fuel Handling Operations" are merely a subset of the procedures required by Reg. Guide 1.33, thus there is no reason to maintain a separate restatement of this requirement. No change to plant operations or equipment is required by this change, because it is merely removal of a redundant requirement, it has been classified as an administrative change. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- A.16 The example Frequency used in section 1.3, "Frequency" has been modified to be consistent with the only remaining surveillance test interval of 7 days as proposed in change L.8 described below. This is a purely editorial change that merely implements the preference of the facility to minimize the potential for human error in the application of the specifications by making the Use and Application example and the actual Frequency the same. No change to plant operations or equipment is proposed by this change and therefore it has been classified an administrative change.
- A.17 The title of section 3.1 is proposed to be changed from "Defueled Systems" to "Plant Systems" consistent with the titles used in the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group. This change reflects an editorial preference and does not affect the way any plant equipment is operated. Therefore this change was classified an administrative change.

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

- A.18 CTS 5.1.3 indicates that titles used in the technical specifications are generic and that unit-specific titles are identified in the Quality Assurance Topical Report. The substance of this specification is relocated to the proposed TS 5.2.1.a. No substantive change is proposed and this change will not affect the way the plant is operated or maintained. Therefore this change was classified as administrative in nature. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

#### More Restrictive Changes

- M.1 The CTS 5.2.1 requirement for independence of individual who train the Certified Fuel Handlers has been modified to require independence from unit activity pressures for individuals who train the entire unit staff. This is a more restrictive change, because it expands the pool of individuals who must be afforded this independence. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- M.2 Consistent with the proposed generic TS for decommissioned plants, TS 5.5.1.b has been added to require that written procedures be established, implemented and maintained that address implementation of the emergency plan.
- M.3 The requirements of CTS 5.6.3, "Fuel Storage Pool Water Chemistry Program," have been expanded into a requirement to maintain a "Fuel Storage Pool Program" consistent with the proposed generic TS for decommissioned plants. This change removes the focus on fuel storage pool water chemistry and generalizes the program requirement to assure that the spent fuel storage pool is maintained as described in the DSAR.
- M.4 Changes are proposed to modify specification 5.1.1 to ensure consistency with the proposed generic TS for permanently shutdown plants. The proposed additions are consistent with the proposed generic TS, however are slightly modified to reflect plant specific position titles and the location of Millstone Unit 1 on a shared site with two operating nuclear power plants. The change will restrict delegation of authority to those times when a Designated Officer or Designated Manager are absent. In addition, an explicit requirement for the Designated Manager to approve proposed tests, experiments, or modifications that effect the safe storage of irradiated fuel has been proposed.

#### Details Relocated to Other Plant Controlled Documents

- LA.1 Current TS SR 3.1.1 requires that the Fuel Storage Pool water level be measured and recorded every 24 hours. The proposed TS requires that the water level be measured every 7 days. However, the requirement to record the Fuel Storage Pool water level is proposed to be relocated to the Northeast Utilities Quality Assurance Topical Report. The Northeast Utilities Quality Assurance Program (NUQAP) requires that records be maintained to document compliance with the Technical Specifications. Therefore, this requirement is not required to be in the TS. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

**Discussion of Changes**  
**Millstone Station Unit No. 1 Technical Specifications**

- LA.2 Not Used.
- LA.3 CTS 5.5.2 through 5.5.7 describe the review and approval of programs and procedures that are required by CTS 5.5.1. These details are proposed for relocation to the Northeast Utilities Quality Assurance Program (NUQAP). These requirements are not included in the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group or the generic standard technical specifications contained in NUREG-1430, NUREG-1431, etc.. Relocating these requirements to the NUQAP will not change the existing requirements, however it will afford the opportunity to revise these requirements consistent with activities at the facility as it is decontaminated and dismantled. Any proposed changes to the review and approval process will be subject to reviews in accordance with 10 CFR 50.54(a), which will ensure that the appropriate level of safety continues to be maintained.
- LA.4 CTS 5.6.1 includes a requirement that changes to the REMODCM be reviewed and accepted by the Site Operations Review Committee (SORC). In addition, changes must be approved by the designated officer before they are effective. This proposed change will relocate the requirement associated with the SORC review and acceptance to the Northeast Utilities Quality Assurance Program (NUQAP). Relocating these requirements to the NUQAP will not change the existing requirements, however it will afford the opportunity to revise these requirements consistent with organizational changes at the facility as it is decontaminated and dismantled. Any proposed changes to the review and approval process will be subject to reviews in accordance with 10 CFR 50.54(a), which will ensure that the appropriate level of safety continues to be maintained. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- LA.5 Details of the requirements for monitoring of spent fuel pool water chemistry contained in CTS 5.6.3 are proposed for relocation to the Defueled Safety Analysis Report. This level of detail is not appropriate or needed in the TS. Any proposed changes to the review and approval process will be subject to reviews in accordance with 10 CFR 50.59, which will ensure that the appropriate level of safety continues to be maintained. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

#### Relocated Requirements

- R.1 CTS 3.2.1, "Reactor Building Crane Operability," and 3.2.2, "Reactor Building Crane Travel with a Spent Fuel Cask," are proposed for relocation to the Technical Requirements Manual (TRM). Relocating these requirements is consistent with the direction provided in 10 CFR 50.36 because the specifications do not satisfy the criteria in the regulation. This is consistent with the construction of specifications so that they place appropriate limits on plant conditions or operation to ensure assumptions of the safety analysis that fulfill the criteria of 10 CFR 50.36 are preserved. Administrative controls were developed and have been implemented to control the movement of heavy loads around the fuel storage pool. These existing administrative controls provide assurance that conditions will not occur that could lead to a condition outside of the design basis assumptions of the accident analyses for the plant. This proposed change will not reduce the controls applicable to use of the Reactor Building Crane and any subsequent changes to these requirements after relocation to the TRM will be reviewed in accordance with 10 CFR 50.59. The generic BWR improved standard TS contained in NUREG-1433, and the proposed TS for permanently shutdown reactors do not include similar specifications or requirements. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

#### Less Restrictive Changes

- L.1 The Bases for LCO 3.1.1 and the unit specific safety analysis describe the design basis accident as a fuel handling accident. The safety analysis assumed a failure of fuel assemblies due to a non-mechanistic event as the bounding Fuel Handling Accident. This analysis evaluated the failure of a very conservative four fuel assemblies by using a surrogate load drop of the spent fuel pool gate, in lieu of a dropped assembly which would result in significantly reduced consequences. This LCO preserves the safety analysis assumption that at least 33 feet of water is present in the fuel storage pool to limit the releases from postulated ruptured fuel assemblies during a fuel handling accident.

This change proposes to modify the Applicability of the LCO to those times when a fuel handling accident could occur, i.e., during the movement of irradiated fuel in the fuel storage pool. This is consistent with the construction of specifications so that they place appropriate limits on plant conditions or operation to ensure assumptions of the safety analysis that fulfill the criteria of 10 CFR 50.36 are preserved. Administrative controls were developed and have been implemented to control the movement of heavy loads around the fuel storage pool. These existing administrative controls provide assurance that conditions will not occur that could lead to a condition outside of the design basis assumptions of the accident analyses for the plant.

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

Consistent with this change, the second Required Action of Condition A is removed, and changes to the remaining action are proposed to make it consistent with the Applicability terminology. The appropriate action if a specification is not met is to immediately restore the required parameter (in this case, the water level), or to exit the Applicability of the specification. Since returning a parameter to within limits is always an option for restoration of compliance with the TS, the existing second Required Action is not required. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

- L.2 Restrictions on changes to the site boundaries, ownership, and control of property at the Millstone site are proposed for deletion from CTS 4.1. These restrictions were established to preserve assumptions used in siting the facility at its location. Adequate controls over changes to the site boundary, ownership, and usage are provided by 10 CFR 50.59 because this information is described in the Defueled Safety Analysis Report. Therefore, any changes to the site boundaries, ownership or control of the property would require appropriate review that ensures the assumptions used in siting the facility are preserved. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- L.3 CTS Design Feature 4.2.1 is proposed for deletion because the facility is permanently shutdown and defueled, and new fuel is no longer stored at the site. Irradiated fuel storage is described in CTS 4.2.2, which corresponds to proposed TS 4.2.1.
- L.4 CTS 5.1.2 and 5.2.2g have been deleted. This change is consistent with the permanently defueled and decommissioned condition of the facility. The position of Shift Manager is no longer required. The responsibilities formerly performed by the Shift Manager may now be fulfilled by a qualified staff that monitors the condition of the facility and ensures compliance with the Technical Specifications. As described in the safety analysis, changing conditions that could occur at the facility no longer require immediate response by a control room staff such that a "control room command function" exists. Adequate staff remains onsite to respond to postulated and unforeseen emergencies, including staff from the operating units. The site Emergency Plan and procedures have been modified to transfer the responsibility for declaring an emergency at Millstone Unit 1 to the operating units operating staff.

With removal of the Shift Manager position, the associated explicit qualification requirement of CTS 5.2.2g is no longer required. Proposed and current TS 5.3, "Facility Staff Qualifications," will continue to ensure that qualified individuals provide management and direction over unit activities.

- L.5 Not Used.
- L.6 The level of information and direction provided in CTS 5.6.3 is being changed to eliminate unnecessary details. In addition, the requirement to notify the NRC prior to elimination or changes to the acceptance criteria for critical variables related to the fuel storage pool water chemistry is being eliminated. These requirements do not satisfy the criteria of 10 CFR 50.36 for administrative controls which states that:

## Discussion of Changes

### Millstone Station Unit No. 1 Technical Specifications

Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

Based on this, the level of detail provided by the CTS is proposed for deletion from the Technical Specifications. In addition, the requirement to notify the NRC is being eliminated since any condition of significance that requires notification of the NRC will be required by 10 CFR 50.72 and 50.73. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.

- L.7 CTS 5.7.1 and proposed TS 5.7.1 have been changed to add the option of using electronic dosimetry to determine and assign dose to various job functions in the Occupational Radiation Exposure Report. This change will provide the flexibility of utilizing the latest technology to determine and assign dose. This change is consistent with the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group.
- L.8 The Frequency for performing SR 3.1.1 is proposed for change from once every 24 hours to once every 7 days. This change is consistent with the surveillance frequency in the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR Owners' Group. The proposed Frequency is also consistent with that found in the generic BWR improved standard Technical Specifications, NUREG-1433, Revision 1.

This Frequency is typically considered adequate at an operating unit when spent fuel may have recently been off-loaded from a core and decay heat loads and radiation levels are significantly higher.

The only event of concern is a non-mechanistic failure of the pool, with the proposed additional technical restriction on fuel pool drainage and control as described at M.3 above. The spent fuel storage pool is a substantial concrete structure with a steel liner and integral leak detection system. Sudden, catastrophic loss of inventory is not a credible event. Therefore the surveillance requirement is more appropriately directed to identification and correction of potential inventory removal paths such as evaporation.

Millstone Unit 1 has performed analyses to determine the effects of a loss of decay heat removal capability. These calculations demonstrate that more than 10 days are available between the loss of heat removal capability and the boiling conditions to exist in the pool. In this analysis, the maximum evaporation rate from the pool was also evaluated and determined to be less than 3.8 gallons per minute. The proposed Frequency of 7 days is appropriate and provides assurance that a loss of water level would be identified, and could be corrected, before any affect on the safe storage of spent fuel could occur.

- L.9 The spent fuel storage rack limit on  $k_{eff}$  to be less than or equal to 0.90 in the CTS is proposed for revision. The proposed limit of  $k_{eff}$  less than or equal to 0.95 is consistent with the limit in the proposed generic TS for decommissioned plants as submitted on October 12, 1999 in letter BWROG-99075 from W. Glenn Warren, Chairman, BWR

## **Discussion of Changes**

### **Millstone Station Unit No. 1 Technical Specifications**

Owners' Group. The proposed limit is also consistent with that found in the generic BWR improved standard Technical Specifications, NUREG-1433, Revision 1. This limit remains adequate to ensure that the fuel stored in the spent fuel storage racks will remain sub-critical by a significant margin. Although this change is a less restrictive change to the limits in the specifications, the tangible effect of the change is merely to align the proposed limit with those in the standard specifications, while continuing to ensure that the spent fuel is stored in a physical arrangement that prevents inadvertent criticality.

- L.10 CTS 5.4.1 requires that the facility maintain a training and retraining program for Certified Fuel Handlers (CFHs). This requirement is proposed for removal from the specifications because it is redundant with the requirements of 10 CFR 50. Proposed change LA.2 will relocate the requirements for shift staffing to the Unit 1 NUQAP. The requirements associated with the CFH position are not deleted by proposed change LA.2, merely relocated to a licensee controlled document. CTS requirement 5.4.1 is no longer needed because the requirements of 10 CFR 50.2 clearly state that a CFH is "a non-licensed operator who has qualified in accordance with a fuel handler training program approved by the Commission." To satisfy this requirement of 10 CFR 50, an NRC approved training and retraining program must be maintained. Therefore the requirement of CTS 5.4.1 provides no useful guidance, and is redundant with other applicable requirements, and unnecessary.

**Discussion of Changes**  
**Millstone Station Unit No. 1 Technical Specifications Bases**

Proposed Changes

- B.1 Consistent with the contents of the Technical Specifications, the Bases for SR 3.0.3 are proposed for change to remove the discussion of a Surveillance with a Frequency that is based not on time intervals, but upon specified facility conditions or operational situations. The proposed TS no longer contain such a Surveillance requirement and the discussion is no longer required.
- B.2 The Bases for the Applicability of LCO 3.1.1 has been changed to be consistent with the proposed changes to the associated Technical Specification.
- B.3 The Bases for Action A.1 has been clarified and the Bases discussion of A.2 for LCO 3.1.1 has been deleted consistent with the proposed changes to the associated Technical Specification.
- B.4 The Bases for LCO 3.2.1 and 3.2.2 have been deleted, consistent with the relocation of the specifications to the TRM as described in the proposed changes to the CTS.
- B.5 The Bases for SR 3.1.1 is modified to reflect the proposed surveillance frequency described above in change number L.8 to SR 3.1.1.



Attachment 4 to B18247

Millstone Nuclear Power Station, Unit No. 1

Significant Hazards Considerations for Proposed Changes

## NO SIGNIFICANT HAZARDS CONSIDERATION

### ADMINISTRATIVE CHANGES

#### ("A.x" Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves reformatting, renumbering, and rewording the existing Technical Specifications. The reformatting, renumbering, and rewording process involves no technical changes to the existing Technical Specifications. As such, this change is administrative in nature and does not impact initiators of analyzed events or assumed mitigation of accident or transient events. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will not impose any new or eliminate any old requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on any safety analyses assumptions. This change is administrative in nature. Therefore, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### TECHNICAL CHANGES - MORE RESTRICTIVE ("M.x" Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, NNECO has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change provides more stringent requirements for operation of the facility. These more stringent requirements do not result in operation that will increase the probability of initiating an analyzed event and do not alter assumptions relative to mitigation of an accident or transient event. The more restrictive requirements continue to ensure process variables, structures, systems, and components are maintained consistent with the safety analyses and licensing basis. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in the methods governing normal plant operation. The proposed change does impose different requirements. However, these changes are consistent with the assumptions in the safety analyses and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The imposition of more restrictive requirements either has no impact on or increases the margin of plant safety. As provided in the discussion of the change, each change in this category is by definition, providing additional restrictions to enhance plant safety. The change maintains requirements within the safety analyses and licensing basis. Therefore, this change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### "GENERIC" LESS RESTRICTIVE CHANGES:

### RELOCATING DETAILS TO OTHER PLANT CONTROLLED DOCUMENTS

#### ("LA.x" Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, NNECO has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change relocates certain details from the Technical Specifications to the TRM or the Millstone Unit 1 Northeast Utilities Quality Assurance Program (NUQAP). The TRM will be maintained in accordance with 10 CFR 50.59. The NUQAP is subject to the change control provisions 10 CFR 50.54(a). Since any changes to the TRM or NUQAP will be evaluated per the requirements of 10 CFR 50.59 or 10 CFR 50.54(a) respectively, no increase (significant or insignificant) in the probability or consequences of an accident previously evaluated will be allowed. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The proposed change will not impose or eliminate any requirements, and adequate control of the information will be maintained. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the details to be transposed from the Technical Specifications to the TRM, or the NUQAP documents are the same as the existing Technical Specifications. Since any future changes to these details in the TRM or NUQAP will be evaluated per the requirements of 10 CFR 50.59 or 10 CFR 50.54(a) respectively, no reduction (significant or insignificant) in a margin of safety will be allowed.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### RELOCATED SPECIFICATIONS

#### ("R.x" Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, NNECO has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change relocates requirements and surveillances for structures, systems, or components (SSCs) that do not meet the criteria for inclusion in Technical Specifications as defined in 10 CFR 50.36. The affected SSCs are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events. The requirements and surveillances for these affected SSCs will be relocated from the Technical Specifications to an appropriate administratively controlled document which will be maintained pursuant to 10 CFR 50.59. In addition, the affected SSCs are addressed in existing surveillance procedures which are also controlled by 10 CFR 50.59 and subject to the change control provisions imposed by plant administrative procedures, which endorse applicable regulations and standards. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant activities. The proposed change will not impose or eliminate any requirements and adequate control of existing requirements will be maintained. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on any safety analysis assumptions. In addition, the relocated requirements and surveillances for the affected SSCs remain the same as the existing Technical Specifications. Since any future changes to these requirements or the surveillance procedures will be evaluated per the requirements of 10 CFR 50.59, no reduction in a margin of safety will be permitted.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.1 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. This change modifies the Applicability of LCO 3.1.1 from "Whenever irradiated fuel is stored in the Fuel Storage Pool" to "During movement of irradiated fuel assemblies in the Fuel Storage Pool." This is consistent with the conditions addressed and assumed in the analysis of a fuel handling accident. Required Action A.2 is also deleted since, with the corresponding change to the Applicability, it is no longer required. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves modifying the Applicability of LCO 3.1.1 to correspond directly with the conditions to which the LCO applies. LCO 3.1.1 provides assurance that adequate pool water level is maintained to ensure that the assumptions of the design basis fuel handling accident are met. The design basis accident assumes a non-mechanistic failure of the fuel pins in four assemblies. The analysis assumes that a water level below that required by LCO 3.1.1. If fuel handling is not occurring, the fuel pool water level does not satisfy the criteria for inclusion in the Technical Specifications as a parameter assumed as an initial condition of the safety analysis. Therefore this change merely aligns the LCO Applicability with the safety analysis assumptions.

Aligning the Applicability directly with the conditions that must exist for a design basis accident to occur does not affect the probability or consequences of an accident previously evaluated. Rather, it ensures that the previously evaluated accident probability and consequences are unchanged. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will merely align the Applicability of an existing LCO with the conditions that exist when the limit of the LCO is credited in the safety analysis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because the change merely aligns the Applicability of LCO 3.1.1 with the conditions that exist when the limit of the LCO is credited in the safety analysis. Therefore, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.2 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The proposed change removes a restriction from Section 4.1, Site Location, which restricts the sale or lease of portions of the site other than to the listed organizations. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves removing an administrative restriction on the ownership and ability to lease portions of the site to organizations other than those listed. Removing this restriction will not affect the probability of an accident previously evaluated, since these restrictions are not related to any precursor or contributor to the causes for any accident previously evaluated. Removing the restrictions will similarly not increase the consequences of an accident previously evaluated, since the proposed change does not result in a transfer of ownership or grant of lease of the described property. Any such activity would be subjected to a review in accordance with the requirements of 10 CFR 50.59, since the ownership and physical description of the plant are described in the Defueled Safety Analysis Report. The evaluation performed at that time would ensure that no increase in the consequences of an accident previously evaluated. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change merely removes an administrative requirement that limits the ability to sell or lease portions of the site. These controls are not associated with any onsite activity that could result in a new or different kind of accident. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety, because it does not result in any change to the plant or the way it is operated. The proposed change merely removes an administrative restriction on the ability to lease or sell portions of the site. Since the site description is provided in the Defueled Safety Analysis Report, any such activity would be subject to a review in accordance with the requirements of 10 CFR 50.59. This review would ensure that there is no reduction in margin of safety associated with any future proposed changes. Therefore, this change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.3 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The proposed change removes a limit associated with the storage of fuel in the new fuel storage facility. With the permanent shutdown and defueled condition of the plant, and the removal of all un-irradiated fuel from the site, the new fuel storage facility will no longer be used and this restriction is no longer required. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves removing restrictions on  $k_{eff}$  in the new fuel storage facility. Fuel can no longer be stored in the new fuel storage facility because all un-irradiated fuel has been removed from the site, and radiological considerations prevent the placement of irradiated fuel in the new fuel storage facility. The design basis accident for Millstone Unit No. 1 is the postulated Fuel Handling Accident described in the Defueled Safety Analysis Report. The postulated accident involves irradiated fuel located in the spent fuel storage pool. Therefore, this requirement provides no useful information and does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will not impose any new requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety, because the requirements that are proposed for elimination do not affect the design or operation of the facility since the plant was permanently shutdown, defueled, and all un-irradiated fuel has been removed from the unit. Since the proposed change has no effect on the facility and merely removes unnecessary information from the Technical Specifications, the change does not involve a significant reduction in a margin of safety.



## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.4 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The proposed change involves removing the requirement for a Shift Manager who is qualified as a Certified Fuel Handler and is responsible for the control room command function. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves removing the requirement for a Shift Manager who is qualified as a Certified Fuel Handler and who is responsible for the control room command function. Millstone Unit No. 1 has been shutdown for over four years, and there are no remaining postulated or credible accidents that require a complex immediate response from operating personnel. The required response to postulated and credible accidents at the facility are a small subset of those that were required when the facility was in operation. Based on this, there is no longer a need for a specific position designation for the individual who will exercise the control room command function.

In addition, the requirement for a Certified Fuel Handler to fulfill the Shift Manager responsibility is no longer appropriate because for extended periods no fuel handling operations will be conducted. Fuel Handling activities are deliberate pre-planned evolutions. There are no postulated or credible accidents that would result in the need to perform an unplanned fuel movement. Plant procedures and other administrative controls will continue to ensure that Certified Fuel Handler responsibilities are fulfilled by appropriately qualified individuals when activities dictate the need.

Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities because qualified individuals will continue to be available to perform required functions. The proposed change will not impose any new or eliminate any old requirements associated with any structure, system or component. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety, because qualified individuals will continue to be available to perform activities required to ensure the safe storage of irradiated fuel and control of radioactive materials. The proposed changes will eliminate unnecessarily burdensome requirements that were developed to address the requirements

## **NO SIGNIFICANT HAZARDS CONSIDERATION**

of an operating facility but which no longer apply at a permanently shutdown and defueled facility such as Millstone Unit No. 1. Therefore, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### **SPECIFIC LESS RESTRICTIVE CHANGES (L.5 Labeled Comments/Discussions)**

DOC L.5 is not used.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.6 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The proposed change removes an administrative requirement for notification to be made to the NRC prior to changes to acceptance criteria for chemistry control of the Fuel Storage Pool. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

Removing the requirement for prior notification of the NRC cannot have any effect on the probability or consequence of an accident previously evaluated, since the requirement to perform this notification is not associated or related in any way to the probability or consequences of any accident.

The consequence of an accident previously evaluated are not affected since no change to the way the fuel storage pool is monitored, is proposed. Notification of the NRC does not affect the consequences of any previously evaluated accident. The proposed change merely reduces the administrative burden associated with maintaining the program in compliance with the Technical Specifications.

Therefore, these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed changes will not impose any new or eliminate any old requirements. Thus, these changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed changes will not reduce a margin of safety because they merely remove administrative burden associated with implementing the Fuel Storage Pool Program by eliminating a requirement for notification to the NRC of proposed changes to acceptance criteria to be used. Therefore, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### **SPECIFIC LESS RESTRICTIVE CHANGES** **(L.7 Labeled Comments/Discussions)**

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. The proposed change merely adds the option to use electronic dosimetry. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves adding the explicit option to utilize electronic dosimetry as a means of monitoring occupational radiation exposure. The means of monitoring occupational dose are unrelated to the probability or consequences of any accident previously evaluated. The means of measuring occupational exposures is merely a limit on the technology that may be utilized to perform a measurement required by federal regulations. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of plant systems, structures or components (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will not impose any new or eliminate any old requirements related to the safe storage of irradiated nuclear fuel or the control of radioactive materials. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety, because the means of measuring the occupational exposure of workers is unrelated to the margin of safety of the facility. The means of measuring occupational exposures is merely a limit on the technology that may be utilized to perform a measurement required by federal regulations.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.8 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. This change will extend the surveillance Frequency from once every 24 hours to once every 7 days. The proposed Frequency is consistent with the reduced decay heat load and the lack of available mechanistic failures that could lead to sudden or unanticipated reduction in spent fuel pool inventory. The associated Bases are modified to reflect the proposed interval. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves extending the Frequency interval of SR 3.1.1 to correspond with the conditions of the facility. SR 3.1.1 provides assurance that adequate pool water level is maintained to ensure that the assumptions of the design basis fuel handling accident are met. There are no longer any credible mechanisms that could lead to an unanticipated or undetected reduction in spent fuel pool inventory. The proposed 7 day Frequency is consistent with the decay heat load calculations, potential maximum evaporation rates, and the large volume of water available over the spent fuel in the storage pool.

Aligning this SR directly with the conditions that exist in the facility does not affect the probability or consequences of an accident previously evaluated. Rather, it continues to ensure that the previously evaluated accident probability and consequences are unchanged. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will merely align the Frequency of an existing SR with the conditions in the facility. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because the change merely aligns the Frequency of performance of SR 3.1.1 with the conditions that exist in the plant. Therefore, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.9 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. This change modifies the spent fuel storage rack limit on  $k_{eff}$  from less than or equal to 0.90 to less than or equal to 0.95. The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change involves modifying the  $k_{eff}$  limit that the spent fuel storage racks are designed and maintained to. The current and proposed limit are established to provide a significant margin of assurance that the spent fuel cannot be made critical while stored in the racks and under design basis accident conditions.

Changing the limit on  $k_{eff}$  from 0.90 to 0.95 does not significantly affect the assurance that the spent fuel racks will maintain the fuel in a sub-critical configuration. Both limits are substantially below the limit of 1.0, and provide adequate assurance of safety. The proposed change therefore does not affect the probability or consequences of an accident previously evaluated. Rather, it continues to ensure that the previously evaluated accident probability and consequences are unchanged. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will merely increase the limit on  $k_{eff}$  so that it is consistent with industry practice and established standards applicable to the storage of spent fuel. Criticality continues to be avoided by maintaining the storage racks such that  $k_{eff}$  is less than or equal to 0.95. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The margin of safety defined by the limit is that the spent fuel will remain sub-critical during anticipated circumstances and design basis accidents. Since the proposed limit continues to provide this assurance, the change does not involve a significant reduction in a margin of safety.

## NO SIGNIFICANT HAZARDS CONSIDERATION

### SPECIFIC LESS RESTRICTIVE CHANGES

#### (L.10 Labeled Comments/Discussions)

In accordance with the criteria set forth in 10 CFR 50.92, Northeast Nuclear Energy Company (NNECO) has evaluated this proposed Technical Specifications change and determined it does not represent a significant hazards consideration. This change removes the redundant requirement to maintain an NRC approved training and retraining program for the Certified Fuel Handlers (CFHs). The following is provided in support of this conclusion.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change removes a TS administrative requirement that is redundant to existing requirements that derive from 10 CFR 50.2. Therefore the TS requirement is not needed and does not effect the probability or consequences of an accident previously evaluated. The change is purely administrative, albeit a specific reduction in the requirements of the TS. The requirement will continue to apply to the unit. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods governing normal plant activities. The proposed change will merely remove an unneeded, redundant requirement. Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because the requirement for an NRC approved training program for CFHs will continue to exist as specified in 10 CFR 50.2. Therefore, the change does not involve a significant reduction in a margin of safety.



Attachment 5 to B18247

Millstone Nuclear Power Station, Unit No. 1

Environmental Assessment of Proposed Changes

## ENVIRONMENTAL ASSESSMENT

In accordance with the criteria set forth in 10 CFR 50.21, NNECO has evaluated this proposed Technical Specification change for identification of licensing and regulatory actions requiring environmental assessment. NNECO has determined the change meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that this change is being proposed as an amendment to a license issued pursuant to 10 CFR which changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or which changes an inspection or a surveillance requirement, and the amendment meets the following specific criteria:

1. The amendment involves no significant hazards consideration.

As demonstrated in the No Significant Hazards Consideration, this proposed amendment does not involve any significant hazards consideration.

2. There is no significant change in the type or significant increase in the amounts of any effluents that may be released offsite.

The proposed change will not result in changes in the operation or configuration of the facility. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal result in any change in the normal radiation levels within the plant. Therefore, there will be no change in the types or significant increase in the amounts of any effluents released offsite resulting from this change.

3. There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed change will not result in changes in the operation or configuration of the facility which impact radiation exposure. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal result in any change in the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from this change.

Therefore, based upon the above evaluation, NNECO has concluded that no irreversible consequences exist with the proposed change.