Northeast
Nuclear Energy

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The Northeast Utilities System

JUN - 1 2000

Docket No. 50-423
B18064

Re: 10 CFR 50.90

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

Millstone Nuclear Power Station, Unit No. 3
Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation

Pursuant to 10 CFR 50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License NPF-49 by incorporating the attached proposed changes into the Millstone Unit No. 3 Technical Specifications. NNECO is proposing to change Technical Specifications 3.3.3.2, "Instrumentation, Movable Incore Detectors," 3.3.3.3, "Instrumentation, Seismic Instrumentation," 3.3.3.4, "Instrumentation, Meteorological Instrumentation," 3.3.3.8, "Loose-Part Detection System," 3.3.4, "Turbine Overspeed Protection" and Index Pages vi and vii. The Bases of the affected Technical Specifications will be modified to address the proposed changes.

The proposed changes will relocate selected Technical Specifications related to instrumentation to the Millstone Unit No. 3 Technical Requirements Manual (TRM). The relocated information will be maintained in accordance with the provisions of 10 CFR 50.59. The proposed relocation of selected Technical Specifications to the TRM is consistent with the Nuclear Regulatory Commission (NRC) Generic Letter (GL) 95-10.[1]

(1) NRC Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation," dated December 15, 1995.

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Attachment 1 provides a discussion of the proposed changes and the Safety Summary. Attachment 2 provides the Significant Hazards Consideration. Attachment 3 provides the marked-up version of the appropriate pages of the current Technical Specifications. Attachment 4 provides the retyped pages of the Technical Specifications and associated Bases.

Environmental Considerations

NNECO has reviewed the proposed License Amendment Request against the criteria of 10 CFR 51.22 for environmental considerations. These changes will not significantly increase the type and amounts of effluents that may be released offsite. In addition, this amendment request will not significantly increase individual or cumulative occupational radiation exposures. Therefore, NNECO has determined the proposed changes will not have a significant effect on the quality of the human environment.

Conclusions

The proposed changes were evaluated and we have concluded that they are safe. The proposed changes do not involve a significant impact on public health and safety (see the Safety Summary provided in Attachment 1) and do not involve a Significant Hazards Consideration pursuant to the provisions of 10 CFR 50.92 (see the Significant Hazards Consideration provided in Attachment 2).

Plant Operations Review Committee and Nuclear Safety Assessment Board

The Plant Operations Review Committee and Nuclear Safety Assessment Board have reviewed and concurred with the determinations.

Schedule

We request issuance of this amendment for Millstone Unit No. 3 prior to January 31, 2001, with the amendment to be implemented within 60 days of issuance.

State Notification

In accordance with 10 CFR 50.91(b), a copy of this License Amendment Request is being provided to the State of Connecticut.

There are no regulatory commitments contained within this letter.

If you should have any questions on the above, please contact Mr. Ravi Joshi at (860) 440-2080.

Very truly yours

NORTHEAST NUCLEAR ENERGY COMPANY

Raymond P. Necci
Vice President - Nuclear Technical Services

Subscribed and sworn to before me

this 1 day of June, 2000

Donna Lynne Williams
Notary Public

Date Commission Expires: Nov 30, 2001

Attachments (4)

cc: H. J. Miller, Region I Administrator
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Docket No. 50-423
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Attachment 1

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
Discussion of Proposed Changes

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
Discussion of Proposed Changes

Background

Northeast Nuclear Energy Company (NNECO) is proposing to relocate selected Technical Specifications related to instrumentation to the Millstone Unit No. 3 Technical Requirements Manual (TRM). The proposed changes affect Technical Specifications 3.3.3.2, "Instrumentation, Movable Incore Detectors," 3.3.3.3, "Instrumentation, Seismic Instrumentation," 3.3.3.4, "Instrumentation, Meteorological Instrumentation," 3.3.3.8, "Loose-Part Detection System," and 3.3.4, "Turbine Overspeed Protection". Additionally, Index Pages vi and vii and the Bases of the associated Technical Specifications will be revised to reflect the proposed changes.

The Millstone Unit No. 3 TRM includes information which has been relocated from Technical Specifications or material which has been judged to warrant administrative control. Modifications to the TRM are performed pursuant to the provisions of 10 CFR 50.59. Due to the nature of the material contained in the TRM and its potential impact on plant licensing, the TRM is maintained as a controlled document within the Nuclear Group. The TRM is referenced by the Millstone Unit No. 3 Final Safety Analysis Report (FSAR).

The proposed changes are described below:

Technical Specification 3.3.3.2

The movable incore detector instrumentation is used periodically to calculate power peaking factors to verify nuclear design predictions, ensure operation within established fuel performance limits, and calibrate other nuclear instrumentation. The measurements are used in a confirmatory manner and do not provide direct input to Reactor Protection System or Engineered Safety Features Actuation System functions.

Technical Specification 3.3.3.2 will be relocated to the TRM where future changes will be controlled in accordance with 10 CFR 50.59. The text on the corresponding page will be deleted and replaced with, "This page intentionally left blank."

Technical Specification 3.3.3.3

The seismic monitoring instrumentation is used to record data for use in evaluating the effect of a seismic event. The seismic monitoring instrumentation is not used to mitigate a Design Basis Accident (DBA) or transient. The capability of the plant to withstand a seismic event or other DBA is determined by the initial design and construction of systems, structures, and components.

Technical Specification 3.3.3.3 will be relocated to the TRM where future changes will be controlled in accordance with 10 CFR 50.59. The text on the corresponding pages will be deleted and replaced with, "This page intentionally left blank."

Technical Specification 3.3.3.4

A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological monitoring instrumentation serves a useful function in estimating radiation doses to the public from either routine or accidental releases of radioactive materials to the atmosphere.

Technical Specification 3.3.3.4 will be relocated to the TRM where future changes will be controlled in accordance with 10 CFR 50.59. The text on the corresponding pages will be deleted and replaced with, "This page intentionally left blank."

Technical Specification 3.3.3.8

The loose-part detection instrumentation identifies the existence of possible loose parts in the Reactor Coolant System (RCS). Early detection can give operators time to take corrective actions and avoid or mitigate damage to or malfunctions of primary system components.

Technical Specification 3.3.3.8 will be relocated to the TRM where future changes will be controlled in accordance with 10 CFR 50.59. The text on the corresponding pages will be deleted and replaced with, "This page intentionally left blank."

Technical Specification 3.3.4

The turbine is equipped with control valves and stop valves which control turbine speed during normal plant operation and protect it from overspeed during abnormal conditions. The turbine overspeed protection instrumentation consists of separate mechanical and electrical sensing mechanisms which are capable of initiating fast closure of the control and stop valves.

Technical Specification 3.3.4 will be relocated to the TRM where future changes will be controlled in accordance with 10 CFR 50.59. The text on the corresponding pages will be deleted and replaced with, "This page intentionally left blank."

Index Pages

Index Page vi will be revised by eliminating the sections corresponding to movable incore detector instrumentation (page 3/4 3-46), seismic instrumentation (page 3/4 3-47), meteorological instrumentation (page 3/4 3-50) and the Loose-Part Detection

System (page 3/4 3-68). Index Page vii will be revised by eliminating the section corresponding to Turbine Overspeed Protection (page 3/4 3-81).

Technical Specification Bases

The proposed changes to Bases Sections 3.3.3.2, 3.3.3.3, 3.3.3.4, 3.3.3.8 and 3.3.4 will delete the text associated with each section and replace the section titles with the word, "DELETED." These sections will also be relocated to the TRM.

Safety Summary

10 CFR 50.36c(2)(ii) contains the requirements for items that must be in Technical Specifications. This regulation provides four (4) criteria that can be used to determine the requirements that must be included in the Technical Specifications. Items not meeting any of the four criteria can be relocated from Technical Specifications to a Licensee controlled document. The Licensee can then change the relocated requirements, if necessary, in accordance with 10 CFR 50.59. This should result in significant reductions in time and expense to modify requirements that have been relocated while not adversely affecting plant safety. The criteria, and an evaluation of each Technical Specification proposed for relocation are provided below.

Technical Specification 3.3.3.2

Technical Specification 3.3.3.2 is proposed to be relocated to the TRM. This specification ensures that the specified minimum complement of detector thimbles are operable to ensure an accurate representation of the spatial neutron flux distribution of the core is provided.

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

The movable incore detector instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The movable incore detector instrumentation does not meet Criterion 1.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Although the core power distribution (measured by the movable incore detector instrumentation) constitutes an important initial condition to DBAs and therefore needs to be addressed by Technical Specifications, the detectors themselves are not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The movable incore detector instrumentation does not meet Criterion 2.

Criterion 3

A Structure, System, or Component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The movable incore detector instrumentation is not a SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The movable incore detector instrumentation does not meet Criterion 3.

Criterion 4

A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The equipment covered by this Technical Specification has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. This Technical Specification does not cover a SSC requiring risk review/unavailability monitoring. This specification does not meet Criterion 4.

The requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. In addition, the NRC has stated in Generic Letter (GL) 95-10[1] that the movable incore detector instrumentation requirements do not meet the criteria of 10 CFR 50.36 for inclusion in Technical Specifications. Therefore, this Technical Specification can be relocated to the TRM.

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(1) NRC Generic Letter 95-10, "Relocation of Selected Technical Specifications Requirements Related to Instrumentation," dated December 15, 1995.

Technical Specification 3.3.3.3

Technical Specification 3.3.3.3 is proposed to be relocated to the TRM. This specification ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. Seismic monitoring instrumentation is required by section VI(a)(3) of Appendix A to 10 CFR 100 to allow for a comparison of the measured response to that used in the design basis for the unit. Comparison of such data is needed to (1) determine whether the plant can continue to be operated safely and (2) permit such timely action as may be appropriate.

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

The seismic monitoring instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The seismic monitoring instrumentation does not meet Criterion 1.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The seismic monitoring instrumentation is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The seismic monitoring instrumentation does not meet Criterion 2.

Criterion 3

A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The seismic monitoring instrumentation is not assumed to function in the safety analysis. The seismic monitoring instrumentation is not a SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The seismic monitoring instrumentation does not meet Criterion 3.

Criterion 4

A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The equipment covered by this Technical Specification has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. This Technical Specification does not cover a SSC requiring risk review/unavailability monitoring. This specification does not meet Criterion 4.

The requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. In addition, the NRC has stated in GL 95-10 that the seismic monitoring instrumentation does not meet the criteria of 10 CFR 50.36 for inclusion in Technical Specifications. Therefore, this Technical Specification can be relocated to the TRM.

Technical Specification 3.3.3.4

Technical Specification 3.3.3.4 is proposed to be relocated to the TRM. This specification ensures that sufficient capability is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. Timely access to accurate local meteorological data is important for estimating potential radiation doses to the public and for determining appropriate protective measures.

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

The meteorological monitoring instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The meteorological monitoring instrumentation does not meet Criterion 1.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The meteorological monitoring instrumentation is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the

integrity of a fission product barrier. The meteorological monitoring instrumentation does not meet Criterion 2.

Criterion 3

A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The meteorological monitoring instrumentation is not assumed to function in the safety analysis. The meteorological monitoring instrumentation is not a SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The meteorological monitoring instrumentation does not meet Criterion 3.

Criterion 4

A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The equipment covered by this Technical Specification has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. This Technical Specification does not cover a SSC requiring risk review/unavailability monitoring. This specification does not meet Criterion 4.

The requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. In addition, the NRC has stated in GL 95-10 that the meteorological monitoring instrumentation does not meet the criteria of 10 CFR 50.36 for inclusion in Technical Specifications. Therefore, this Technical Specification can be relocated to the TRM.

Technical Specification 3.3.3.8

Technical Specification 3.3.3.8 is proposed to be relocated to the TRM. This specification ensures that sufficient capability is available to detect loose metallic parts in the RCS and avoid or mitigate damage to RCS components. Early detection of loose parts within the RCS can give operators time to take corrective actions and avoid or mitigate damage to or malfunctions of primary system components.

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

The loose-part detection instrumentation does not function to detect significant abnormal degradation of the reactor coolant pressure boundary. The loose-part detection instrumentation does not meet Criterion 1.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The loose-part detection instrumentation is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 3

A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The loose-part detection instrumentation is not a SSC that serves as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria. The loose-part detection instrumentation does not serve as an active design feature for establishing initial conditions or mitigation of DBAs or transients. The loose-part detection instrumentation does not meet Criterion 3.

Criterion 4

A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The equipment covered by this Technical Specification has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. This Technical Specification does not cover a SSC requiring risk review/unavailability monitoring. This specification does not meet Criterion 4.

The requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. In addition, the NRC has stated in GL 95-10 that the loose-part detection instrumentation does not meet the criteria of 10 CFR 50.36 for inclusion in Technical Specifications. Therefore, this Technical Specification can be relocated to the TRM.

Technical Specification 3.3.4

Technical Specification 3.3.4 is proposed to be relocated to the TRM. This specification ensures that the turbine overspeed protection instrumentation and the turbine speed control valves will protect the turbine from excessive overspeed.

Criterion 1

Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

The turbine overspeed protection instrumentation is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The turbine overspeed protection instrumentation does not meet Criterion 1.

Criterion 2

A process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The DBAs and transients include a variety of system failures and conditions which might result from turbine overspeed events and potential missiles striking various plant systems and equipment. System failures and plant conditions are much more likely to be caused by events other than turbine failures. In the Millstone Unit No. 3 Safety Evaluation Report,[2] the Staff concluded that "the probability of unacceptable damage to safety-related SSCs resulting from turbine missiles is acceptably low (i.e., less than 10^{-7} per year) provided the total turbine missile generation probability is such that conformance with the criteria presented in Table 3.1 is maintained, throughout the life of the plant, by acceptable inspection and test programs. In reaching this conclusion, the Staff has factored into consideration the unfavorable orientation of the turbine generators." Relocation of the turbine overspeed protection instrumentation will not affect the scope and frequency of applicable inspections and tests performed on the turbine overspeed protection instrumentation.

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[2] NUREG 1031, "Safety Evaluation Report related to the operation of Millstone Nuclear Power Station, Unit No. 3," dated July, 1984.

In view of the low likelihood of turbine missiles, assumptions related to the turbine overspeed protection instrumentation are not part of an initial condition of a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The turbine overspeed protection instrumentation does not meet Criterion 2.

Criterion 3

A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The turbine overspeed protection instrumentation is not assumed to function in the safety analysis. The turbine overspeed protection instrumentation is not a SSC that is relied upon in the DBA or transient analyses as a primary success path to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. A turbine missile event is not covered in Chapter 15 of the facility FSAR. The turbine overspeed protection instrumentation does not meet Criterion 3.

Criterion 4

A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Probabilistic safety assessments and operating experience have demonstrated that proper maintenance of the turbine overspeed control valves is important to minimize the potential for overspeed events and turbine damage. However, that experience has also demonstrated that there is a low likelihood of significant risk to public health and safety because of turbine overspeed events. Further, the potential for and consequences of turbine overspeed events are diminished by factors such as the Millstone Unit No. 3 inservice test program, which complies with 10 CFR 50.55(a), and the Millstone Unit No. 3 surveillance program for the turbine control and stop valves.

The equipment covered by this Technical Specification has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. This Technical Specification does not cover a SSC requiring risk review/unavailability monitoring. This specification does not meet Criterion 4.

The requirements contained in this specification do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. In addition, the NRC has stated in GL 95-10 that the turbine overspeed protection

instrumentation does not meet the criteria of 10 CFR 50.36 for inclusion in Technical Specifications. Therefore, this Technical Specification can be relocated to the TRM.

Index Pages

Revision of Index Pages vi and vii is an administrative change. This change is consistent with the changes previously discussed. Therefore, the proposed changes will have no adverse effect on plant safety.

Technical Specification Changes - Bases

The information contained in the bases of the affected Technical Specifications will not be modified as a result of the proposed Technical Specification changes. The proposed changes will not result in any new approaches to plant operation. Therefore, the proposed Bases changes will not adversely affect public safety.

The relocation of the requirements for the Technical Specifications to the TRM will not result in any new approaches to plant operation and will not adversely affect any accident mitigation equipment. The plant response to the DBAs will not change. Therefore, the proposed changes will not adversely affect public health and safety. Thus, the proposed changes are safe.

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Attachment 2

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
Significant Hazards Consideration

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
Significant Hazards Consideration

Description of License Amendment Request

The proposed changes will relocate Technical Specifications 3.3.3.2, "Instrumentation, Movable Incore Detectors," 3.3.3.3, "Instrumentation, Seismic Instrumentation," 3.3.3.4, "Instrumentation, Meteorological Instrumentation," 3.3.3.8, "Loose-Part Detection System," 3.3.4, "Turbine Overspeed Protection" to the Technical Requirements Manual (TRM).

Basis for No Significant Hazards Consideration

In accordance with 10 CFR 50.92, NNECO has reviewed the proposed changes and has concluded that they do not involve a Significant Hazards Consideration (SHC). The basis for this conclusion is that the three criteria of 10 CFR 50.92(c) are not compromised. The proposed changes do not involve an SHC because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   The proposed changes to relocate the movable incore detector instrumentation, seismic monitoring instrumentation, meteorological monitoring instrumentation, loose-part detection instrumentation, and turbine overspeed protection instrumentation from the Technical Specifications to the TRM will have no adverse effect on plant operation, or the availability or operation of any accident mitigation equipment. The plant response to the DBAs will not change. In addition, the movable incore detector instrumentation, seismic monitoring instrumentation, meteorological monitoring instrumentation, and loose-part detection instrumentation are not accident initiators and can not cause an accident. For the turbine overspeed protection instrumentation, the DBAs and transients include a variety of system failures and conditions which might result from turbine overspeed events and potential missiles striking various plant systems and equipment. However, in view of the low likelihood of the generation of turbine missiles, the turbine overspeed protection instrumentation does not serve a primary protective function. Therefore, these changes will not significantly increase the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

   The proposed changes to relocate the movable incore detector instrumentation, seismic monitoring instrumentation, meteorological monitoring instrumentation, loose-part detection instrumentation, and turbine overspeed protection instrumentation do not alter the plant configuration (no new or different type of equipment will be installed) or require any new or unusual operator actions. They do not alter the way any SSC functions and do not alter the manner in which the plant is operated. The proposed changes do not introduce any new failure modes. Therefore, the proposed changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

   The proposed Technical Specification and Bases changes will relocate the requirements for the movable incore detector instrumentation, seismic monitoring instrumentation, meteorological monitoring instrumentation, loose-part detection instrumentation, and turbine overspeed protection instrumentation from Technical Specifications to the TRM. Any future changes to the relocated requirements will be in accordance with 10 CFR 50.59 and approved station procedures. The proposed changes will have no adverse effect on plant operation, or the availability or operation of any accident mitigation equipment. The plant response to the DBAs will not change. In addition, the relocated requirements do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. Therefore, there will be no significant reduction in a margin of safety.

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Attachment 3

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
Marked Up Pages

~~October 25, 1990~~

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INSTRUMENTATION

MOVABLE INCORE DETECTORS

LIMITING CONDITION FOR OPERATION

3.3.3.2 The Movable Incore Detection System shall be OPERABLE with:

a. At least 75% of the detector thimbles,

b. A minimum of two detector thimbles per core quadrant, and

c. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the Movable Incore Detection System is used for:

a. Recalibration of the Excore Neutron Flux Detection System, or

b. Monitoring the QUADRANT POWER TILT RATIO, or

c. Measurement of $F^N_{\Delta H}$, $F_Q(Z)$ and F_{xy}.

ACTION:

With the Movable Incore Detection System inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.2 The Movable Incore Detection System shall be demonstrated OPERABLE at least once per 24 hours by normalizing each detector output when required for:

a. Recalibration of the Excore Neutron Flux Detection System, or

b. Monitoring the QUADRANT POWER TILT RATIO, or

c. Measurement of $F^N_{\Delta H}$, $F_Q(Z)$ and F_{xy}.

~~October 25, 1990~~

INSTRUMENTATION

SEISMIC INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.3 The seismic monitoring instrumentation shown in Table 3.3-7 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one or more of the above required seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification ~~6~~ 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.3.1 Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and ANALOG CHANNEL OPERATIONAL TEST at the frequencies shown in Table 4.3-4.

4.3.3.3.2 Each of the above required seismic monitoring instruments actuated during a seismic event shall be restored to OPERABLE status within 24 hours and a CHANNEL CALIBRATION performed within 10 days following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. A Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 14 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.

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03/08/93

TABLE 3.3-7
SEISMIC MONITORING INSTRUMENTATION

INSTRUMENTS AND SENSOR LOCATIONS	MEASUREMENT RANGE	MINIMUM INSTRUMENTS OPERABLE
1. Triaxial Time-History Accelerographs		
a. NBE20A Containment Mat. (-24'3")	± 1g (5v/g)	1
b. NBE20B Containment Wall (40'6")	± 1g (5v/g)	1
c. NBE21 Emer. Generator Enclosure Located on Mat in Diesel Fuel Oil Vault (4'6")	± 1g (5v/g)	1
d. NBE22 Aux. Bldg. F-Line Wall Near The Charging Pumps Cooling Surge Tank (46'6")	± 1g (5v/g)	1
2. Triaxial Peak Accelerographs		
a. P/A1 Containment Safety Injection Accum. Tank (-4'7")	± 2g	1
b. P/A2 Safety Injection Accum Disch. Line (-22'10")	± 2g	1
c. P/A3 Aux. Bldg. Charging Pumps Cooling Surge Tank (46'6")	± 1g	1
3a. Triaxial Seismic Trigger		
Horizontal (Control Room)	.01g	1*
Vertical (Control Room)	.006g	1*
3b. Triaxial Seismic Switch		
Horizontal (Control Room)	.09g	1**
Vertical (Control Room)	.06g	1**
4. Triaxial Response-Spectrum Recorders		
a. RSA-50 Spectrum Analyzer (Control Room)	1-32 Hz Peak Acceleration in Gs (Max of 1g)	1*
b. Self-Contained Recorder Steam Generator Support (51'4")	0-30 Hz at ± 2g	1

*With reactor control room indicator. This unit is activated by signals from the NBE20A Triaxial Accelerograph.
**This unit is activated by signals from the NBE20A Triaxial Accelerograph and is connected to an annunciator in the reactor control room.

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~~January 3, 1995~~

TABLE 4.3-4

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENTS AND SENSOR LOCATIONS	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST
1. Triaxial Time-History Accelerographs			
a. NBE20A Containment Mat (-24'3")	M	R	SA
b. NBE20B Containment Wall (40'6")	M	R	SA
c. NBE21 Emer. Generator Enclosure Located on Mat in Diesel Fuel Oil Vault (4'6")	M	R	SA
d. NBE22 Aux. Bldg. F-Line Wall Near The Charging Pumps Cooling Surge Tank (46'6")	M	R	SA
2. Triaxial Peak Accelerographs			
a. P/A1 Containment Safety Injection Accum. Tank (-4'7")	N.A.	R	N.A.
b. P/A2 Safety Injection Accum. Disch. Line (-22'10")	N.A.	R	N.A.
c. P/A3 Aux. Bldg. Charging Pumps Cooling Surge Tank (46'6")	N.A.	R	N.A.
3a. Triaxial Seismic Trigger			
Horizontal (Control Room)	M	R	SA
Vertical (Control Room)	M	R	SA
3b. Triaxial Seismic Switch			
Horizontal (Control Room)	M	R	SA
Vertical (Control Room)	M	R	SA
4. Triaxial Response-Spectrum Recorders			
a. RSA-50 Spectrum Analyzer (Control Room)	M	R	SA
b. Self-Contained Recorder Steam Generator Support (51'4")	N.A.	R	N.A.

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INSTRUMENTATION

METEOROLOGICAL INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.3.4 The meteorological monitoring instrumentation channels shown in Table 3.3-8 shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

a. With one or more required meteorological monitoring channels inoperable for more than 7 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

b. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.4 Each of the above meteorological monitoring instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK and CHANNEL CALIBRATION at the frequencies shown in Table 4.3-5.

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TABLE 3.3-8

METEOROLOGICAL MONITORING INSTRUMENTATION

~~JAN 31 1986~~

INSTRUMENT	LOCATION	MINIMUM OPERABLE
1. Wind Speed		
a. WS-33	Nominal Elev. 33'	1
b. WS-142	Nominal Elev. 142'	1
c. WS-374	Nominal Elev. 374'	1
2. Wind Direction		
a. WD-33	Nominal Elev. 33'	1
b. WD-142	Nominal Elev. 142'	1
c. WD-374	Nominal Elev. 374'	1
3. Air Temperature - ΔT*		
a. DT-142	Nominal Elev. 142'	1
b. DT-374	Nominal Elev. 374'	1

*Group reference is 33'. ΔT is the measured difference between the temperature at 33' and the temperature at elevations 142' and 374', respectively.

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JAN 31 1986

TABLE 4.3-5

METEOROLOGICAL MONITORING INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Wind Speed		
a. Nominal Elev. 33'	D	SA
b. Nominal Elev. 142'	D	SA
c. Nominal Elev. 374'	D	SA
2. Wind Direction		
a. Nominal Elev. 33'	D	SA
b. Nominal Elev. 142'	D	SA
c. Nominal Elev. 374'	D	SA
3. Air Temperature - ΔT		
a. Nominal Elev. 33' - 142'	D	SA
b. Nominal Elev. 33' - 374'	D	SA

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~~December 28, 1995~~

INSTRUMENTATION

LOOSE-PART DETECTION SYSTEM

LIMITING CONDITION FOR OPERATION

3.3.3.8 The Loose-Part Detection System shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With one or more Loose-Part Detection System channels inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

b. The provisions of Specifications 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.8 Each channel of the Loose-Part Detection Systems shall be demonstrated OPERABLE by performance of:

a. A CHANNEL CHECK at least once per 24 hours,

b. An ANALOG CHANNEL OPERATIONAL TEST at least once per 31 days, and

c. A CHANNEL CALIBRATION at least once each REFUELING INTERVAL.

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3/4.3.4 TURBINE OVERSPEED PROTECTION

LIMITING CONDITION FOR OPERATION

3.3.4 At least one Turbine Overspeed Protection System shall be OPERABLE.

APPICABILITY: MODES 1, 2,* and 3.*

ACTION:

a. With one stop valve or one governor valve per high pressure turbine steam line inoperable and/or with one reheat stop valve or one reheat intercept valve per low pressure turbine steam line inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours, or close at least one valve in the affected steam line(s) or isolate the turbine from the steam supply within the next 6 hours.

b. With the above required Turbine Overspeed Protection System otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.4.1 The provisions of Specification 4.0.4 are not applicable.

4.3.4.2 The above required Turbine Overspeed Protection System shall be maintained, calibrated, tested, and inspected in accordance with the Millstone Unit No. 3 Turbine Overspeed Protection Maintenance and Testing Program. Adherence to this program shall demonstrate OPERABILITY of this system. The program and any revisions should be reviewed and approved in accordance with the Quality Assurance Program Topical Report. Revisions shall be made in accordance with the provisions of 10CFR50.59.

*Not applicable in MODE 2 or 3 with all main steam line isolation valves and associated bypass valves in the closed position and all other steam flow paths to the turbine isolated.

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REACTOR TRIP SYSTEM INSTRUMENTATION and ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION (Continued)

The Engineered Safety Features Actuation System interlocks perform the following functions:

P-4 Reactor tripped - Actuates Turbine trip, closes main feedwater valves on T_{avg} below Setpoint, prevents the opening of the main feedwater valves which were closed by a Safety Injection or High Steam Generator Water Level signal, allows Safety Injection block so that components can be reset or tripped.

Reactor not tripped - prevents manual block of Safety Injection.

P-11 On increasing pressurizer pressure, P-11 automatically reinstates Safety Injection actuation on low pressurizer pressure and low steam line pressure. On decreasing pressure, P-11 allows the manual block of Safety Injection actuation on low pressurizer pressure and low steam line pressure.

P-12 On increasing reactor coolant loop temperature, P-12 automatically provides an arming signal to the Steam Dump System. On decreasing reactor coolant loop temperature, P-12 automatically removes the arming signal from the Steam Dump System.

P-14 On increasing steam generator water level, P-14 automatically trips all feedwater isolation valves, main feed pumps and main turbine, and inhibits feedwater control valve modulation.

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING FOR PLANT OPERATIONS

The OPERABILITY of the radiation monitoring instrumentation for plant operations ensures that: (1) the associated action will be initiated when the radiation level monitored by each channel or combination thereof reaches its Setpoint, (2) the specified coincidence logic is maintained, and (3) sufficient redundancy is maintained to permit a channel to be out-of-service for testing or maintenance. The radiation monitors for plant operations senses radiation levels in selected plant systems and locations and determines whether or not predetermined limits are being exceeded. If they are, the signals are combined into logic matrices sensitive to combinations indicative of various accidents and abnormal conditions. Once the required logic combination is completed, the system sends actuation signals to initiate alarms.

3/4.3.3.2 ~~MOVABLE INCORE DETECTORS~~ DELETED

The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the core. The OPERABILITY of this system is demonstrated by irradiating each detector used and determining the acceptability of its voltage curve.

For the purpose of measuring $F_Q(Z)$ or $F^N_{\Delta H}$ a full incore flux map is used. Quarter-core flux maps, as defined in WCAP-8648, June 1976, may be used in recalibration of the Excore Neutron Flux Detection System, and full incore flux maps or symmetric incore thimbles may be used for monitoring the QUADRANT POWER TILT RATIO when one Power Range channel is inoperable.

3/4.3.3.3 ~~SEISMIC INSTRUMENTATION~~ DELETED

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix A of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

3/4.3.3.4 ~~METEOROLOGICAL INSTRUMENTATION~~ DELETED

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data are available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the Remote Shutdown Instrumentation ensures that sufficient capability is available to permit safe shutdown of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of 10 CFR Part 50.

Calibration of the Intermediate Range Neutron Amps channel from Table 4.3-6 applies to the signal that originates from the output of the isolation amplifier within the intermediate range neutron flux processor drawers in the control room and terminates at the displays within the Auxiliary Shutdown Panel.

The OPERABILITY of the Remote Shutdown Instrumentation ensures that a fire will not precluded achieving safe shutdown. The remote shutdown monitoring

3/4.3.3.8 ~~LOOSE-PART DETECTION SYSTEM~~ DELETED

~~The OPERABILITY of the Loose-Part Detection System ensures that sufficient capability is available to detect loose metallic parts in the Reactor System and avoid or mitigate damage to Reactor System components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.~~

3/4.3.3.9 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the REMODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The purpose of tank level indicating devices is to assure the detection and control of leaks that if not controlled could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS.

3/4.3.3.10 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the REMODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The sensitivity of any noble gas activity monitors used to show compliance with the gaseous effluent release requirements of Specification 3.11.2.2 shall be such that concentrations as low as 1×10^{-6} μCi/cc are measurable.

3/4.3.4 ~~TURBINE OVERSPEED PROTECTION~~ DELETED

~~This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment, or structures.~~

Docket No. 50-423
B18064

Attachment 4

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-3-00
Relocation of Selected Technical Specifications Related to Instrumentation
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3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the Remote Shutdown Instrumentation ensures that sufficient capability is available to permit safe shutdown of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of 10 CFR Part 50.

Calibration of the Intermediate Range Neutron Amps channel from Table 4.3-6 applies to the signal that originates from the output of the isolation amplifier within the intermediate range neutron flux processor drawers in the control room and terminates at the displays within the Auxiliary Shutdown Panel.

The OPERABILITY of the Remote Shutdown Instrumentation ensures that a fire will not preclude achieving safe shutdown. The remote shutdown monitoring

3/4.3.3.8 DELETED

3/4.3.3.9 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the REMODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The purpose of tank level indicating devices is to assure the detection and control of leaks that if not controlled could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS.

3/4.3.3.10 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The Alarm/Trip Setpoints for these instruments shall be calculated and adjusted in accordance with the methodology and parameters in the REMODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The sensitivity of any noble gas activity monitors used to show compliance with the gaseous effluent release requirements of Specification 3.11.2.2 shall be such that concentrations as low as 1×10^{-6} μCi/cc are measurable.

3/4.3.4 DELETED