**Dominion Nuclear Connecticut, Inc.**
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385

Dominion

AUG 14 2002

Docket No. 50-336
B18696

RE: 10 CFR 50.90

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

Millstone Nuclear Power Station, Unit No. 2
License Basis Document Change Request 2-17-02
Containment Systems

Introduction

Pursuant to 10 CFR 50.90, Dominion Nuclear Connecticut, Inc. (DNC), hereby proposes to amend Operating License DPR-65 by incorporating the attached proposed changes into the Technical Specifications of Millstone Unit No. 2. DNC is proposing to change Technical Specifications 1.8, "Definitions - Containment Integrity," 3.6.1.1, "Primary Containment - Containment Integrity," 3.6.1.6, "Containment Structural Integrity," 3.6.3.1, "Containment Isolation Valves," and 6.0, "Administrative Controls." The Bases for these Technical Specifications will also be revised to address the proposed changes.

The proposed changes will add an administrative requirement for a Concrete Containment Tendon Surveillance Program. The proposed surveillance program will also merge the operability requirements currently associated with a separate Limiting Condition for Operation (LCO) for Containment Structural Integrity with the LCO for Containment Integrity. Operability of the containment is ensured in the Containment Integrity specification. An increase in allowed outage time (AOT) to 72 hours for Containment Isolation Valves (CIVs) in closed systems is also proposed to be consistent with AOT of other Millstone Unit No. 2 Technical Specifications for loss of one train of redundancy and to incorporate approval of Technical Specifications Task Force Traveler TSTF-30.[1] Other changes to Containment Integrity and CIV Specifications will improve usability and provide clarification.

A001

[1] Technical Specification Task Force (TSTF) -30, Revision 3, "Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours;" Approved January 11, 1999.

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.

Environmental Considerations

DNC has evaluated the proposed changes against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.22. DNC has determined that the proposed changes meet the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that the changes are being proposed as an amendment to a license issued pursuant to 10 CFR 50 that changes a requirement with respect to use of a facility component located within the restricted area, as defined by 10 CFR 20, or that changes an inspection or a surveillance requirement, and that the amendment request meets the following specific criteria.

(i) The proposed changes involve no Significant Hazards Consideration.

As demonstrated in Attachment 2, the proposed changes do not involve a Significant Hazards Consideration.

(ii) There is no significant change in the types or significant increase in the amounts of any effluent that may be released off site.

The proposed changes to both Containment Integrity and CIV Specifications do not modify the containment structure, valves, or operation of the plant. A new administrative requirement for a Concrete Containment Tendon Surveillance Program that replaces the LCO associated with Containment Structural Integrity will continue to ensure the operability and structural integrity of the containment vessel. Operability requirements for Containment Integrity and CIVs remain the same. Other changes to Containment Integrity and CIV Specifications improve usability and provide clarification. The proposed changes are consistent with the design basis of the plant and the associated design basis accident analyses. The proposed changes will not result in an increase in power level, will not increase the production of radioactive waste and by-products, and will not alter the flowpath or method of disposal of radioactive waste or by-products. Therefore, the proposed changes will not increase the type and amounts of effluents that may be released off site.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed changes to both Containment Integrity and CIV Specifications do not modify the containment structure, valves, or operation of the plant. Operability requirements for Containment Integrity and CIVs remain the same, and containment vessel structural integrity will continue to be maintained. The proposed changes are consistent with the design basis of the plant and the associated design basis accident analyses. The proposed changes will not result in changes in the configuration of the facility. There will be no change in the level of controls or methodology used for processing radioactive effluents or the handling of solid radioactive waste. There will be no change to the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from the proposed changes.

## Conclusions

The proposed changes have been evaluated and we have concluded the proposed changes are safe. The proposed changes do not involve an adverse 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).

## Site Operations Review Committee and Nuclear Safety Assessment Board

The Site 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. 2 by August 15, 2003, with the amendment to be implemented within 90 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,

DOMINION NUCLEAR CONNECTICUT, INC.

J. Alan Price
Site Vice President - Millstone

Sworn to and subscribed before me

this 14 day of August, 2002

Notary Public

WM. E. BROWN
*NOTARY PUBLIC*
MY COMMISSION EXPIRES MAR. 31, 2006

My Commission expires

Attachments (4)

cc: H. J. Miller, Region I Administrator
R. B. Ennis, NRC Senior Project Manager, Millstone Unit No. 2
NRC Senior Resident Inspector, Millstone Unit No. 2

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

Docket No. 50-336
B18696

Attachment 1

Millstone Nuclear Power Station, Unit No. 2

License Basis Document Change Request 2-17-02
Containment Systems
Discussion of Proposed Changes and Safety Summary

License Basis Document Change Request 2-17-02
Containment Systems
Discussion of Proposed Changes and Safety Summary

Dominion Nuclear Connecticut, Inc. (DNC), hereby proposes to amend Operating License DPR-65 by incorporating the attached proposed changes into the Technical Specifications of Millstone Unit No. 2. DNC is proposing to change Technical Specifications 1.8, "Definitions - Containment Integrity," 3.6.1.1, "Primary Containment - Containment Integrity," 3.6.1.6, "Containment Structural Integrity," 3.6.3.1, "Containment Isolation Valves," and 6.0, "Administrative Controls." The Bases for these Technical Specifications will also be revised to address the proposed changes.

The proposed changes will add an administrative requirement for a Concrete Containment Tendon Surveillance Program. The proposed surveillance program will also merge the operability requirements currently associated with a separate Limiting Condition for Operation (LCO) for Containment Structural Integrity with the LCO for Containment Integrity. An increase in allowed outage time (AOT) to 72 hours for Containment Isolation Valves (CIVs) in closed systems is also proposed to be consistent with AOT of other Millstone Unit No. 2 Technical Specifications for loss of one train of redundancy and to incorporate approval of Technical Specifications Task Force Traveler TSTF-30.[(1)] Other changes to Containment Integrity and CIV Specifications will improve usability and provide clarification.

Technical Specification Changes

Each proposed Technical Specification change, identified by specification, will be discussed.

1. Technical Specifications 1.8, "Definitions - Containment Integrity," (page 1-2):

   In item 1.8.3, the change replaces the text "OPERABLE pursuant" with "in compliance with the requirements of". The revised item 1.8.3 will state "The air lock is in compliance with the requirements of Specification 3.6.1.3."

   This change is clarification, and administrative. It does not change operability requirements of containment integrity or the airlock, but assists in determining when an entry into Technical Specifications for containment integrity would apply.

2. Technical Specifications 3.6.1.1, "Primary Containment - Containment Integrity," (page 3/4 6-1):

   This change deletes the footnote " * " to "CONTAINMENT INTEGRITY" in the Action Statement.

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(1) Technical Specification Task Force (TSTF) -30, Revision 3, "Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours;" Approved January 11, 1999.

The deleted note that describes when containment integrity exists is more clearly described in the definition of containment integrity, Technical Specifications 1.8, by the change described in item 1 above. This change is clarifying and administrative, with no reduction in requirements.

3. Technical Specifications 3.6.1.1, "Primary Containment - Containment Integrity," Surveillance Requirement 4.6.1.1, (page 3/4 6-1):

   This change formats the footnote identifiers " ** " and " *** " with the identifiers of " (1) " and " (2) ", respectively. The content of both footnotes will remain the same.

   Footnotes are renumbered due to the deletion described above, and the change is non-technical.

4. Technical Specifications 3.6.1.1, "Primary Containment - Containment Integrity," Surveillance Requirement 4.6.1.1, (page 3/4 6-1):

   In Surveillance Requirement 4.6.1.1.a, under requirements for how primary containment integrity is demonstrated, the footnote " (3) " will be added to state isolation devices in high radiation areas may be verified by use of administrative means.

   Allowing verification by administrative means is considered acceptable, since access to these areas is typically restricted. Therefore, the probability of misalignment of these devices once they have been verified to be in the proper position is small. This requirement provides a practical means to perform this verification in high radiation areas and is also consistent with the Improved Standard Technical Specifications, NUREG-1432.

5. Technical Specifications 3.6.1.1, "Primary Containment - Containment Integrity," Surveillance Requirement 4.6.1.1, (page 3/4 6-1):

   In Surveillance Requirement 4.6.1.1.c, the change replaces the text "OPERABLE per" with "in compliance with the requirements of". The proposed text of 4.6.1.1.c will state the following: "By verifying the containment air lock is in compliance with the requirements of Specification 3.6.1.3."

   This change is clarification, and administrative. It does not change the operability requirements of containment integrity or the airlock, but assists in determining when an entry into Technical Specifications for containment integrity would apply.

6. Technical Specifications 3.6.1.1, "Primary Containment - Containment Integrity," Surveillance Requirements, (page 3/4 6-1):

   This change will add Surveillance Requirement 4.6.1.1.e, under requirements for how primary containment integrity is demonstrated, to state "Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program."

This new surveillance requirement ensures structural integrity of the containment vessel will be maintained in accordance with the provisions of the Concrete Containment Tendon Surveillance Program. Testing and frequency are consistent with recommendations of Regulatory Guide 1.35, Revision 3. The use of both this surveillance requirement and an administrative requirement for the Concrete Containment Tendon Surveillance Program is also consistent with the Improved Standard Technical Specifications, NUREG-1432.

7. Technical Specifications 3.6.1.6, "Containment Structural Integrity," (pages 3/4 6-10, 3/4 6-11):

   Delete Technical Specifications 3.6.1.6. The phrase "This Page Intentionally Left Blank" will be added to pages 3/4 6-10 and 3/4 6-11. This is due to a new administrative program added to Section 6.0 of the Millstone Unit No. 2 Technical Specifications, (see item 12 below for additional discussion).

   This proposed change combines operability requirements from Technical Specifications 3.6.1.6, (Containment Structural Integrity), and 3.6.1.1 (Containment Integrity). The containment serves as a barrier to prevent the release of fission products following a Design Basis Accident (DBA). The containment must meet its functional requirements, including remaining structurally intact, to mitigate the potential consequences of a DBA. Technical Specification 3.6.1.6, (Containment Structural Integrity), requires that the capability of the containment structure to withstand peak accident pressure be demonstrated periodically. It outlines a testing program which demonstrates this capability. The program consists of the measurement of containment tendon lift off force and the visual and metallurgical examination of tendons, anchorages, and liner. This proposed change includes these requirements as part of a new administrative requirement for a Containment Tendon Surveillance Program in Technical Specification 6.0, and with a surveillance requirement to Technical Specification 3.6.1.1, (Containment Integrity). The new program requirements are comparable with existing requirements for testing, frequency and recommendations associated with Regulatory Guide 1.35. Operability of the containment is ensured by Technical Specification 3.6.1.1, (Containment Integrity) with the proposed change. The containment structural integrity is not monitored or controlled during plant operation. It is maintained by periodic inspection and testing, that would continue to be performed as part of the new administrative requirement and the proposed surveillance requirement of Technical Specification 3.6.1.1. This change is also consistent with Improved Standard Technical Specifications, NUREG-1432.

8. Technical Specifications 3.6.3.1, "Containment Isolation Valves," (page 3/4 6-15):

   For the LCO in Technical Specifications 3.6.3.1, the footnote to the word OPERABLE, will be numerically expressed as " (1) " and the footnote's text will be revised to replace the words "Locked or sealed closed valves" with "Containment Isolation valves". The revised footnote states "Containment isolation valves may be opened on an intermittent basis under administrative controls."

This change is consistent with current practice in that the specificity of the phrase "locked and sealed closed" was unnecessary. The revised footnote will be comparable to Improved Standard Technical Specifications in NUREG-1432, Rev. 2. There is no reduction in requirements, or changes to operation of CIVs, or to their administrative controls.

9. Technical Specifications 3.6.3.1, "Containment Isolation Valves," (page 3/4 6-15):

   An ACTION item in TS 3.6.3.1 will be added to state in item d the following; "Isolate the affected penetration with only one containment isolation valve and a closed system within 72 hours by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange; or". Note that the ACTION items a through d will be changed to items a through e to accommodate this separate AOT for isolation valves in closed systems.

   This change will add a separate AOT to incorporate the changes included in TSTF-30, which allows an AOT of 72 hours for those penetrations with a single CIV and a closed system. Use of the term "closed system" for containment penetrations in Millstone Unit No. 2 design and licensing basis is not in alignment with, or committed to the requirements of, a "closed system" in the Standard Review Plan 6.2.4. Therefore, additional detail regarding closed system design will be added to the Final Safety Analysis Report (FSAR) Table 5.2-11, "Containment Structure Isolation Valve Information," and Containment System descriptions, to appropriately distinguish the closed system isolation valves, and their penetrations, that are applicable to this new ACTION statement. Consistent with required action in the TSTF-30, the verification of the affected penetration flow path that is isolated would be required at least once per 31 days in Surveillance Requirement 4.6.1.1, item a. The 72 hour AOT is considered appropriate given that certain valves required for isolation may be located inside containment, the reliability of the closed system, and that 72 hours is typically provided for losing one train of redundancy throughout the Millstone Unit No. 2 Technical Specifications (e.g., AOT for restoration of one Emergency Diesel Generator is 72 hours).

10. Technical Specifications 3.6.3.1, "Containment Isolation Valves," (page 3/4 6-15):

   Technical Specification 3.6.3.1 also addresses the function of the main steam system isolation valves to serve as containment isolation valves for General Design Criterion (GDC) penetrations. It is being proposed to relocate applicable requirements of this specification regarding the two 34-inch Main Steam Line Isolation Valves (MSIVs) to Specification 3.7.1.5, "Main Steam Line Isolation Valves". Accordingly, footnote " (2) " will be added to the word "OPERABLE" in the LCO of Specification 3.6.3.1 to state, "Provisions of this specification are not applicable for main steam line isolation valves. However, provisions of Specification 3.7.1.5 are applicable for main steam line isolation valves."

   The proposed change is clarification, and is not a reduction in requirement. The current requirements of LCO 3.6.3.1 can be interpreted to include the MSIVs since these valves serve as CIVs. However, the applicable requirements for the two 34-

inch MSIVs are covered by Technical Specification 3.7.1.5. There is only one MSIV in each main steam line penetration. Removal of MSIVs from the CIV specification does not affect leak testing of the valves since these valves are not Type 'C' leak tested in accordance with 10 CFR 50, Appendix J. The Improved Standard Technical Specifications, NUREG-1432, also addresses this problem with separate Specification action statements for MSIVs. No changes are being proposed to the operability requirements associated with MSIVs, or to the Technical Specification 3.7.1.5. With the proposed footnote, clarification is provided that the applicable requirements for MSIVs are covered by Technical Specification 3.7.1.5.

11. Technical Specifications 6.0, "Administrative Controls," and 6.9.2, "Special Reports," (page 6-20):

    This proposed change to the Special Report that is required by Technical Specification 6.9.2.i, for a degradation of containment structure, will replace the cross reference to "Specification 4.6.1.6.4" with a cross reference to "Specification 6.25." The title of the report is changed to "Tendon Surveillance Report".

    The proposed deletion of Technical Specifications 3.6.1.6, and the new administrative control described below for a Concrete Containment Tendon Surveillance Program results in this administrative requirement being relocated to Technical Specification 6.25. This change is also consistent with Improved Standard Technical Specifications, NUREG-1432. This is an administrative change with no reduction in requirement.

12. Technical Specifications 6.0, "Administrative Controls," (page 6-26):

    Add administrative control 6.25, "Concrete Containment Tendon Surveillance Program," to Technical Specifications.

    This new administrative requirement for a Tendon Surveillance Program, and the proposed additional Surveillance Requirement in 4.6.1.2, are comparable to, and are proposed to replace, the LCO associated with Containment Structural Integrity in 3.6.1.6. This program provides controls, consistent with existing requirements, for the monitoring of any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Regulatory Guide 1.35, Revision 3. This change is also consistent with the Improved Standard Technical Specifications, NUREG-1432.

Technical Specifications Bases:

The Bases for Technical Specifications of Containment Systems, including 3.6.1.6, "Containment Structural Integrity," and 3.6.3.1, "Containment Isolation Valves," will be revised to reflect the new Surveillance Requirement for the Tendon Surveillance Program, and new Action Statement associated with Containment Isolation Valves in closed systems.

Safety Summary

The proposed changes to Millstone Unit No. 2 Technical Specifications 1.8, 3.6.1.1, 3.6.1.6, and 3.6.3.1 do not pose a condition adverse to safety and do not create any adverse safety consequences. The rationale for this conclusion is provided in the balance of this safety summary.

The proposed changes, with exception of a new allowed outage time in Technical Specifications 3.6.3.1, are essentially clarifications to remove ambiguity, that align Specifications more closely with Improved Technical Specifications format in NUREG-1432, and do not create a reduction of requirements or alteration in operations, or design basis. Changes proposed in Technical Specifications 3.6.1, will not alter operability requirements associated with Containment Integrity. Although the LCO for Containment Structural Integrity is deleted, the requirements associated with this LCO are inherent in the new administrative requirement to have a Tendon Surveillance Program, and the proposed new Surveillance Requirement to the LCO for Containment Integrity in 3.6.1.1. The LCO associated with Containment Integrity in 3.6.1.1 does not contain the Action Requirement of 3.6.1.6, that restores structural integrity prior to increasing reactor coolant system temperature above 200°F. However, the Containment Integrity Specification of 3.6.1.1 does contain the requirement for the unit to shut down to Mode 5, and is required to stay in Mode 5 until the Containment Integrity LCO is met. Mode 5 is defined as Cold Shutdown at less than or equal to 200°F. Combining Technical Specifications without technical changes constitutes an administrative change. Similarly, deleting an Action that already exists constitutes an administrative change. The changes in this proposal do not alter plant operations. Changes are not made to CIVs administratively controlled, or to the administrative control requirements or guidance. Any future changes to valves which may be opened under administrative control continue to require an evaluation against 10 CFR 50.59 criteria as part of any Bases change.

The proposed change to Technical Specifications 3.6.3.1 to add a separate AOT to isolate the affected penetration with only one CIV and a closed system within 72 hours incorporates changes in TSTF-30. This change is consistent with the required actions in the previously approved TSTF-30. General Design Criteria (GDC) 57 allows the use of a closed system in combination with a CIV to provide two containment barriers against the release of radioactive material following an accident. A closed system meets the requirements of GDC 57, is not exposed to the containment environment and, therefore, does not constitute a potential leakage path. A closed system is subjected to a Type A containment leakage test, is missile protected, and seismic category 1 piping. A closed system also typically has flow through it during normal operation such that any loss of integrity could be continually observed through leakage detection within containment and by system walkdowns for closed systems outside containment. As such, the use of a closed system is no different from isolating a failed CIV by use of a single valve. Use of the term "closed system" for containment penetrations in Millstone Unit No. 2 design and licensing basis is not in alignment with, or committed to the requirements of, a "closed system" in the Standard Review Plan 6.2.4. Therefore, additional detail regarding closed system design will be added to the FSAR Table 5.2-11, "Containment Structure Isolation Valve Information," and Containment System descriptions, to appropriately distinguish the closed system isolation valves, and their penetrations, that are applicable to this new ACTION statement. The verification of the affected penetration flow path that is isolated would be required at least once per 31 days in Surveillance Requirement 4.6.1.1, item a. The 72 hours is considered appropriate given that certain valves may be located inside containment, the reliability of the closed system, and that 72 hours is typically provided for loosing one train of redundancy throughout the Millstone Unit No. 2 Technical Specifications (e.g., AOT for restoration of one Emergency Diesel Generator is 72 hours).

The proposal does not alter or affect the design, operation, maintenance, or surveillance associated with Millstone Unit No. 2 structures, systems, and components in a detrimental manner during normal or accident operations. Although allowed outage time is to be extended to 72 hours for applications that conform to the 10 CFR 50, Appendix A, GDC 57 closed system isolation valves, operability requirements for containment integrity and CIVs remain the same. This proposal is considered safe because it will not result in a decrease to available safety margins, operation outside of design basis parameters, or adverse impact to the consequences of an accident. This proposal does not cause an increase in risk to the public health or safety. It does not increase probabilities of event occurrence and can not introduce any new accidents or equipment malfunctions.

Attachment 2

Millstone Nuclear Power Station, Unit No. 2

License Basis Document Change Request 2-17-02
Containment Systems
Significant Hazards Consideration

License Basis Document Change Request 2-17-02
Containment Systems
Significant Hazards Consideration

Description of License Amendment Request

Dominion Nuclear Connecticut, Inc. (DNC), hereby proposes to revise the Millstone Unit No. 2 Technical Specifications as described in this License Amendment Request. The proposed changes will add an administrative requirement for a Concrete Containment Tendon Surveillance Program. The proposed surveillance program will merge the operability requirements currently associated with a separate Limiting Condition for Operation (LCO) for Containment Structural Integrity with the LCO for Containment Integrity. An increase in allowed outage time (AOT) to 72 hours for Containment Isolation Valves (CIVs) in closed systems is also proposed to be consistent with AOT of other Millstone Unit No. 2 Technical Specifications for loss of one train of redundancy and to incorporate approval of Technical Specifications Task Force Traveler TSTF-30. Other changes to Containment Integrity and CIV Specifications will improve usability and provide clarification. Operability requirements for containment integrity and CIVs will remain the same.

Significant Hazards Consideration

In accordance with 10 CFR 50.92, DNC 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 Technical Specification changes associated with both containment integrity and CIVs that will remove ambiguity, improve usability, and increase AOT for CIVs in closed systems, will not cause an accident to occur. Operablity requirements for containment integrity and CIVs will remain the same. The ability of the equipment associated with the proposed changes to mitigate the design basis accidents will not be affected. The proposed Technical Specification requirements are sufficient to ensure the required accident mitigation equipment will be available and function properly for design basis accident mitigation. The proposed allowed outage time is reasonable and consistent with standard industry guidelines to ensure the accident mitigation equipment will be restored in a timely manner. In addition, the design basis accidents will remain the same postulated events described in the Millstone Unit No. 2 Final Safety Analysis Report, and the consequences of those events will not be affected. Therefore, the proposed changes will not increase the probability or consequences of an accident previously evaluated.

The additional proposed changes to the Technical Specifications (e.g., changes to index, renumbering a requirement) will not result in any technical changes to the current requirements. Therefore, these additional changes will not 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 the Technical Specifications do not impact any system or component that could cause an accident. The proposed changes will not alter the plant configuration (no new or different type of equipment will be installed) or require any unusual operator actions. The proposed changes will not alter the way any structure, system, or component functions, and will not alter the manner in which the plant is operated. The response of the plant and the operators following an accident will not be different. In addition, 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 changes associated with both containment integrity and CIVs that will remove ambiguity, improve usability, and increase AOT for CIVs in closed systems, will not cause an accident to occur. Operablity requirements for containment integrity and CIVs will remain the same. Although, Containment Structural Integrity and Containment Integrity Specifications are combined, operability of the containment structure will continue to be maintained as part of a surveillance program. The equipment associated with the proposed Technical Specification changes will continue to be able to mitigate the design basis accidents as assumed in the safety analysis. The proposed allowed outage time is reasonable and consistent with standard industry guidelines to ensure the accident mitigation equipment will be restored in a timely manner. In addition, the proposed changes will not affect equipment design or operation, and there are no changes being made to the Technical Specification required safety limits or safety system settings. The proposed Technical Specification changes will provide adequate control measures to ensure the accident mitigation functions are maintained. Therefore, the proposed changes will not result in a reduction in a margin of safety.

The additional proposed changes to the Technical Specifications (e.g., changes to index, renumbering a requirement) will not result in any technical changes to the current requirements. Therefore, these additional changes will not result in a reduction in a margin of safety.

Docket No. 50-336
B18696

Attachment 3

Millstone Nuclear Power Station, Unit No. 2

License Basis Document Change Request 2-17-02
Containment Isolation Valves
Marked Up Pages

License Basis Document Change Request 2-17-02
Containment Systems
Marked Up Pages

The following Technical Specification and associated Bases pages have been proposed to be changed.

| Technical Specification Section Number | Title(s) of Section(s) | Page and Revision Numbers |
|---|---|---|
| Index | Limiting Condition for Operation and Surveillance Requirements | VII, Amend. 233 |
| Index | Administrative Controls | XVII, Amend. 264 |
| 1.8 | Definitions - Containment Integrity | 1-2, Amend. 215 |
| 3.6.1.1 | Containment Systems - Primary Containment - Containment Integrity | 3/4 6-1, Amend. 215 |
| 3.6.1.6 | Containment Systems - Containment Structural Integrity | 3/4 6-10, Amend. 165<br>3/4 6-11, Amend. 239<br>B 3/4 6-2, Amend. 219 |
| 3.6.3.1 | Containment Systems - Containment Isolation Valves | 3/4 6-15, Amend. 210<br>B 3/4 6-3a, NRC letter dated Oct. 4, 2001<br>B 3/4 6-3b, NRC letter dated Oct. 6, 1999<br>B 3/4 6-3c, NRC letter dated May 1, 2002<br>B 3/4 6-3d, NRC letter dated May 1, 2002<br>B 3/4 6-3e, NRC letter dated Oct. 4, 2001 |
| 6.0 | Administrative Controls | 6-20, Amend. 266<br>6-28, Amend. 264 |

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## LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

CONTAINMENT INTEGRITY

1.8 CONTAINMENT INTEGRITY shall exist when:

1.8.1 All penetrations required to be closed during accident conditions are either:

a. Capable of being closed by an OPERABLE containment automatic isolation valve system,* or

b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except for valves that are open under administrative control as permitted by Specification 3.6.3.1,

1.8.2 The equipment hatch is closed and sealed, and

1.8.3 The airlock is in compliance with the requirements of ~~OPERABLE pursuant to~~ Specification 3.6.1.3.

CHANNEL CALIBRATION

1.9 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.10 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

CHANNEL FUNCTIONAL TEST

1.11 A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

*In MODE 4, the requirement for an OPERABLE containment automatic isolation valve system is satisfied by use of the containment isolation trip pushbuttons.

~~May 26, 1998~~

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY~~*~~, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the next 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations** (1) not capable of being closed by OPERABLE containment automatic isolation valves*** (2) and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions (3), except for valves that are open under administrative control as permitted by Specification 3.6.3.1.

b. At least once per 31 days by verifying the equipment hatch is closed and sealed.

c. By verifying the containment air lock is ~~OPERABLE per~~ in compliance with the requirements of Specification 3.6.1.3.

d. After each closing of a penetration subject to type B testing (except the containment air lock), if opened following a Type A or B test, by leak rate testing in accordance with the Containment Leakage Rate Testing Program.

e. INSERT A

*Operation within the time allowances of the ACTION statements of Specification 3.6.1.3 does not constitute a loss of CONTAINMENT INTEGRITY.

(1) **Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed prior to entering MODE 4 from MODE 5, if not performed within the previous 92 days.

(2) ~~***~~In MODE 4, the requirement for an OPERABLE containment automatic isolation valve system is satisfied by use of the containment isolation trip pushbuttons.



(3) Isolation devices in high radiation areas may be verified by use of administrative means.

INSERT A - Technical Specifications 4.6.1.1 (page 3 /4 6-1)

e. Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program.

~~November 16, 1992~~

CONTAINMENT SYSTEMS

CONTAINMENT STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.6 The structural integrity of the containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the structural integrity of the containment not conforming to the above requirements, restore the structural integrity to within the limits prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.6.1 Containment Tendons The containment tendons' structural integrity shall be demonstrated at the end of one,* three and five years following the initial containment structural integrity test and at five year intervals thereafter. The tendons' structural integrity shall be demonstrated by:

a. Determining that a representative sample of at least 21 tendons (6 dome, 5 vertical, and 10 hoop) each have a lift off force of between 7030 (minimum) and 8940 (maximum) pounds per tendon wire. If the lift off force of any one tendon in the total sample population is out of the predicted bounds (less than minimum or greater than maximum), an adjacent tendon on each side of the defective tendon shall also be checked for lift off force. If both of these tendons are found acceptable, the surveillance program may proceed considering the single deficiency as unique and acceptable. More than one defective tendon out of the original sample population is evidence of abnormal degradation of the containment structure. Unless there is evidence of abnormal degradation of the containment structure during the first three tests of the tendons, the number of tendons checked for lift off force during subsequent tests may be reduced to a representative random sample of at least 9 tendons (3 dome, 3 vertical and 3 hoop).

*May be extended to no later than midnight, July 15, 1976.

Replace with words "This page intentionally Left blank."

b. Removing one wire from a dome, a vertical and a hoop tendon checked for lift off force pursuant to Specification 4.6.1.6.1.a and determining that over the entire length of the removed wire that:

1. The tendon wires are free of corrosion.

2. There are no changes in physical appearance of the sheathing filler grease.

3. A minimum tensile strength of 11,760 pounds for at least three wire samples (one from each end and one at mid-length) cut from each removed wire. Failure of any one of the wire samples to meet the minimum tensile strength test is evidence of abnormal degradation of the containment structure.

4.6.1.6.2 End Anchorages and Adjacent Concrete Surfaces The structural integrity of the end anchorages and adjacent concrete surfaces shall be demonstrated by determining through inspection that no apparent changes or degradation has occurred in the visual appearance of the end anchorage concrete exterior surfaces or as indicated by the concrete crack patterns adjacent to the end anchorages. Inspections of the concrete shall be performed concurrent with the containment tendon surveillance (reference Specification 4.6.1.6.1).

4.6.1.6.3 Liner Plate The structural integrity of the containment liner plate shall be determined in accordance with the Containment Leakage Rate Testing Program.

4.6.1.6.4 Reports In lieu of any other report required by Section 50.73 to 10 CFR Part 50, an initial report of any abnormal degradation of the containment structure detected during the above required tests and inspections shall be made within 10 days after completion of the surveillance requirements of this specification and the detailed report shall be submitted pursuant to Specification 6.9.2 within 90 days after completion. This report shall include a description of the condition of the concrete (especially at tendon anchorages), the inspection procedure, the tolerances on cracking, and the corrective actions taken.

Replace with words
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3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that the containment peak pressure does not exceed the design pressure of 54 psig during MSLB or LOCA conditions.

The maximum peak pressure is obtained from a MSLB event. The limit of 1.0 psig for initial positive containment pressure will limit the total pressure to less than the design pressure and is consistent with the accident analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitation on containment air temperature ensures that the containment air temperature does not exceed the worst case combined LOCA/MSLB air temperature profile and the liner temperature of 289°F. The containment air and liner temperature limits are consistent with the accident analyses.

The temperature detectors used to monitor primary containment air temperature are located on the 38 ft. 6 in. floor elevation in containment. The detectors are located approximately 6 feet above the floor, on the southeast and southwest containment walls.

3/4.6.1.6 ~~CONTAINMENT STRUCTURAL INTEGRITY~~ DELETED

This limitation ensures that the structural integrity of the containment vessel will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the vessel will withstand the design pressure of 54 psig in the event of a LOCA or MSLB. The measurement of containment tendon lift off force, the visual and metallurgical examination of tendons, anchorages and liner and the Type A leakage tests are sufficient to demonstrate this capability.

The surveillance requirements for demonstrating the containment's structural integrity are in compliance with the recommendations of Regulatory Guide 1.35 "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures."

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 Each containment isolation valve shall be OPERABLE.~~*~~ (1)(2)

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) inoperable, either:

a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or

b. Isolate the affected penetration(s) within 4 hours by use of a deactivated automatic valve(s) secured in the isolation position(s), or

c. Isolate the affected penetration(s) within 4 hours by use of a closed manual valve(s) or blind flange(s); or

d. INSERT B

e. ~~d.~~ Be in COLD SHUTDOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1.1 Each isolation valve testable during plant operation shall be demonstrated OPERABLE:

a. At least once per 92 days by:

1. Exercising each power operated valve through one complete cycle of full travel and measuring the isolation time, and

2. Exercising each manual valve, except those that are closed, through one complete cycle of full travel.

b. Immediately prior to returning the valve to service after maintenance, repair or replacement work is performed on the

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(1) ~~*Locked or sealed closed~~ Containment isolation valves may be opened on an intermittent basis under administrative controls.

(2) INSERT C

INSERT B- Technical Specifications 3.6.3.1 (page 3/4 6-15)

d. Isolate the affected penetration that has only one containment isolation valve and a closed system within 72 hours by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange; or

INSERT C- Technical Specifications 3.6.3.1 (page 3/4 6-15)

(2) The provisions of this Specification are not applicable for main steam line isolation valves. However, provisions of Specification 3.7.1.5 are applicable for main steam line isolation valves.

3/4.6.2.1 CONTAINMENT SPRAY AND COOLING SYSTEMS (Continued)

pressure measurement instrument inaccuracies are already reflected in the Technical Specification acceptance criteria.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The Technical Requirements Manual contains the list of containment isolation valves (except the containment air lock and equipment hatch). Any changes to this list will be reviewed under 10CFR50.59 and approved by the committee(s) as described in the ~~NU~~QAP Topical Report.

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

The containment isolation valves are used to close all fluid (liquid and gas) penetrations not required for operation of the engineered safety feature systems, to prevent the leakage of radioactive materials to the environment. The fluid penetrations which may require isolation after an accident are categorized as Type P, O, or N. The penetration types are listed with the containment isolation valves in the Technical Requirements Manual.

Type P penetrations are lines that connect to the reactor coolant pressure boundary (Criterion 55 of 10CFR50, Appendix A). These lines are provided with two containment isolation valves, one inside containment, and one outside containment.

Type O penetrations are lines that are open to the containment internal atmosphere (Criterion 56 of 10CFR50, Appendix A). These lines are provided with two containment isolation valves, one inside containment, and one outside containment.

Type N penetrations are lines that neither connect to the reactor coolant pressure boundary nor are open to the containment internal atmosphere, but do form a closed system within the containment structure (Criterion 57 of 10CFR50, Appendix A). These lines are provided with single containment isolation valves outside containment. These valves are either remotely operated or locked closed manual valves. INSERT D

~~Locked or sealed closed~~ ~~c~~Containment isolation valves may be opened on an intermittent basis provided appropriate administrative controls are established. The position of the NRC concerning acceptable administrative controls is contained in Generic Letter 91-08, "Removal of Component Lists from Technical Specifications," and includes the following considerations:

(1) stationing an operator, who is in constant communication with the control room, at the valve controls,

(2) instructing this operator to close these valves in an accident situation, and

INSERT D - Technical Specifications 3.6.3 (page B 3/4 6-3a)

With one or more penetration flow paths with one containment isolation valve inoperable, the inoperable valve must be restored to OPERABLE status or the affected penetration flow path must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. A check valve may not be used to isolate the affected penetration.

If the containment isolation valve on a closed system becomes inoperable, the remaining barrier is a closed system since a closed system is an acceptable alternative to an automatic valve. However, actions must still be taken to meet Technical Specification ACTION 3.6.3.1.d and the valve, not normally considered as a containment isolation valve, and closest to the containment wall should be put into the closed position. No leak testing of the alternate valve is necessary to satisfy the action statement. Placing the manual valve in the closed position sufficiently deactivates the penetration for Technical Specification compliance. Closed system isolation valves applicable to Technical Specification ACTION 3.6.3.1.d are included in FSAR Table 5.2-11, and are the isolation valves for those penetrations credited as General Design Criteria 57, (Type N penetrations). The specified time (i.e., 72 hours) of Technical Specification ACTION 3.6.3.1.d is reasonable, considering the relative stability of the closed system (hence, reliability) to act as a penetration isolation boundary and the relative importance of supporting containment OPERABILITY during MODES 1, 2, 3, and 4. In the event the affected penetration is isolated in accordance with 3.6.3.1.d, the affected penetration flow path must be verified to be isolated on a periodic basis, (Surveillance Requirement 4.6.1.1.a). This is necessary to assure leak tightness of containment and that containment penetrations requiring isolation following an accident are isolated. The frequency of once per 31 days in this surveillance for verifying that each affected penetration flow path is isolated is appropriate considering the valves are operated under administrative controls and the probability of their misalignment is low.

For the purposes of meeting this LCO, neither the containment isolation valve, nor any alternate valve on a closed system have a leakage limit associated with valve operability.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

(3) assuring that environmental conditions will not preclude access to close the valve and that this action will prevent the release of radioactivity outside the containment.

The appropriate administrative controls, based on the above considerations, to allow ~~locked or sealed closed~~ containment isolation valves to be opened are contained in the procedures that will be used to operate the valves. Entries should be placed in the Shift Manager Log when these valves are opened and closed. However, it is not necessary to log into any Technical Specification Action Statement for these valves, provided the appropriate administrative controls have been established.

If a ~~locked or sealed closed~~ containment isolation valve is opened while operating in accordance with Abnormal or Emergency Operating Procedures (AOPs and EOPs), it is not necessary to establish a dedicated operator. The AOPs and EOPs provide sufficient procedural control over the operation of the containment isolation valves.

Opening a ~~locked or sealed~~ closed containment isolation valve bypasses a plant design feature that prevents the release of radioactivity outside the containment. Therefore, this should not be done frequently, and the time the valve is opened should be minimized. As a general guideline, a ~~locked or sealed~~ closed containment isolation valve should not be opened longer than the time allowed to restore the valve to OPERABLE status, as stated in the action statement for LCO 3.6.3.1 "Containment Isolation Valves."

A discussion of the appropriate administrative controls for the containment isolation valves, that are expected to be opened during operation in MODES 1 through 4, is presented below.

Manual containment isolation valve 2-SI-463, safety injection tank (SIT) recirculation header stop valve, is opened to fill or drain the SITs and for Shutdown Cooling System (SDC) boron equalization. While 2-SI-463 is open, a dedicated operator, in continuous communication with the control room, is required.

When SDC is initiated, SDC suction isolation remotely operated valves 2-SI-652 and 2-SI-651 (inside containment isolation valve) and manual valve 2-SI-709 (outside containment isolation valve) are opened. 2-SI-651 is normally operated from the control room. While in Modes 1, 2 or 3, 2-SI-651 is closed with the closing and opening coils removed and stored to satisfy Appendix R requirements. It does not receive an automatic containment isolation closure signal, but is interlocked to prevent opening if Reactor Coolant System (RCS) pressure is greater than approximately 275 psia. When 2-SI-651 is opened from the control room, either one of the two required licensed (Reactor Operator) control room operators can be credited as the dedicated operator required for administrative control. It is not necessary to use a separate dedicated operator.

When valve 2-SI-709 is opened locally, a separate dedicated operator is not required to remain at the valve. 2-SI-709 is opened before 2-SI-651. Therefore, opening 2-SI-709 will not establish a connection between the RCS and the SDC System. Opening 2-SI-651 will connect the RCS and SDC System. If a problem then develops, 2-SI-651 can be closed from the control room.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

The administrative controls for valves 2-SI-651 and 2-SI-709 apply only during preparations for initiation of SDC, and during SDC operations. They are acceptable because RCS pressure and temperature are significantly below normal operating pressure and temperature when 2-SI-651 and 2-SI-709 are opened, and these valves are not opened until shortly before SDC flow is initiated. The penetration flowpath can be isolated from the control room by closing either 2-SI-652 or 2-SI-651, and the manipulation of these valves, during this evolution, is controlled by plant procedures.

The pressurizer auxiliary spray valve, 2-CH-517, can be used as an alternate method to decrease pressurizer pressure, or for boron precipitation control following a loss of coolant accident. When this valve is opened from the control room, either one of the two required licensed (Reactor Operator) control room operators can be credited as the dedicated operator required for administrative control. It is not necessary to use a separate dedicated operator.

The exception for 2-CH-517 is acceptable because the fluid that passes through this valve will be collected in the Pressurizer (reverse flow from the Pressurizer to the charging system is prevented by check valve 2-CH-431), and the penetration associated with 2-CH-517 is open during accident conditions to allow flow from the charging pumps. Also, this valve is normally operated from the control room, under the supervision of the licensed control room operators, in accordance with plant procedures.

A dedicated operator is not required when opening remotely operated valves associated with Type N fluid penetrations (Criterion 57 of 10CFR50, Appendix A). Operating these valves from the control room is sufficient. The main steam isolation valves (2-MS-64A and 64B), atmospheric steam dump valves (2-MS-190A and 190B), and the containment air recirculation cooler RBCCW discharge valves (2-RB-28.2A-D) are examples of remotely operated containment isolation valves associated with Type N fluid penetrations.

MSIV bypass valves 2-MS-65A and 65B are remotely operated MOVs, but while in MODE 1, they are closed with power to the valve motors removed via lockable disconnect switches located at their respective MCC to satisfy Appendix "R" requirements.

Local operation of the atmospheric steam dump valves (2-MS-190A and 190B), or other remotely operated valves associated with Type N fluid penetrations, will require a dedicated operator in constant communication with the control room, except when operating in accordance with AOPs or EOPs. Even though these valves can not be classified as locked or sealed closed, the use of a dedicated operator will satisfy administrative control requirements. Local operation of these valves with a dedicated operator is equivalent to the operation of other manual (locked or sealed closed) containment isolation valves with a dedicated operator.

The main steam supplies to the turbine driven auxiliary feedwater pump (2-MS-201 and 2-MS-202) are remotely operated valves associated with Type N fluid penetrations. These valves are maintained open during power operation.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

2-MS-201 is maintained energized, so it can be closed from the control room, if necessary, for containment isolation. However, 2-MS-202 is deenergized open by removing power to the valve's motor via a lockable disconnect switch to satisfy Appendix R requirements. Therefore, 2-MS-202 cannot be closed immediately from the control room, if necessary, for containment isolation. The disconect switch key to power for 2-MS-202 is stored in the Unit 2 control room, and can be used to re-power the valve at the MCC; this will allow the valve to be closed from the control room. It is not necessary to maintain a dedicated operator at 2-MS-202 because this valve is already in the required accident position. Also, the steam that passes through this valve should not contain any radioactivity. The steam generators provide the barrier between the containment and the atmosphere. Therefore, it would take an additional structural failure for radioactivity to be released to the environment through this valve.

Steam generator chemical addition valves, 2-FW-15A and 2-FW-15B, are opened to add chemicals to the steam generators using the Auxiliary Feedwater System (AFW). When either 2-FW-15A or 2-FW-15B is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of these valves is expected during plant startup and shutdown.

The bypasses around the main steam supplies to the turbine driven auxiliary feedwater pump (2-MS-201 and 2-MS-202), 2-MS-458 and 2-MS-459, are opened to drain water from the steam supply lines. When either 2-MS-458 or 2-MS-459 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of these valves is expected during plant startup.

The containment station air header isolation, 2-SA-19, is opened to supply station air to containment. When 2-SA-19 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected for maintenance activities inside containment.

The backup air supply master stop, 2-IA-566, is opened to supply backup air to 2-CH-517, 2-CH-518, 2-CH-519, 2-EB-88, and 2-EB-89. When 2-IA-566 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected in response to a loss of the normal air supply to the valves listed.

The nitrogen header drain valve, 2-SI-045, is opened to depressurize the containment side of the nitrogen supply header stop valve, 2-SI-312. When 2-SI-045 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected after using the high pressure nitrogen system to raise SIT nitrogen pressure.

The containment waste gas header test connection isolation valve, 2-GR-63, is opened to sample the primary drain tank for oxygen and nitrogen. When 2-GR-63 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is expected during plant startup and shutdown.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

The upstream vent valves for the steam generator atmospheric dump valves, 2-MS-369 and 2-MS-371, are opened during steam generator safety valve set point testing to allow steam header pressure instrumentation to be placed in service. When either 2-MS-369 or 2-MS-371 is opened, a dedicated operator in continuous communication with the control room is required.

The determination of the appropriate administrative controls for these containment isolation valves included an evaluation of the expected environmental conditions. This evaluation has concluded environmental conditions will not preclude access to close the valve, and this action will prevent the release of radioactivity outside of containment through the respective penetration.

The containment purge supply and exhaust isolation valves are required to be sealed closed during plant operation since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Such a demonstration would require justification of the mechanical operability of the purge valves and consideration of the appropriateness of the electrical override circuits. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system. The containment purge supply and exhaust isolation valves are sealed closed by removing power from the valves. This is accomplished by pulling the control power fuses for each of the valves. The associated fuse blocks are then locked. This is consistent with the guidance contained in NUREG-0737 Item II.E.4.2 and Standard Review Plan 6.2.4, "Containment Isolation System," Item II.f.

CORE OPERATING LIMITS REPORT (CONT.)

FOR INFORMATION - NO CHANGES TO THIS PAGE.

8) XN-NF-78-44(NP)(A), "A Generic Analysis of the Control rod Ejection Transient for Pressurized water reactors," Exxon Nuclear Company.

9) XN-NF-621(P)(A), "Exxon Nuclear DNB Correlation for PWR Fuel Designs," Exxon Nuclear Company.

10) XN-NF-82-06(P)(A) and Supplements 2, 4, and 5, "Qualification of Exxon Nuclear Fuel for Extended Burnup," Exxon Nuclear Company.

11) ANF-88-133(P)(A) and Supplement 1, "Qualification of Advanced Nuclear Fuels PWR Design Methodology for Rod Burnups of 62 GWd/MTU," Advanced Nuclear Fuels Corporation.

12) XN-NF-85-92(P)(A), "Exxon Nuclear Uranium Dioxide/Gadolinia Irradiation Examination and Thermal Conductivity Results," Exxon Nuclear Company.

13) ANF-89-151(P)(A), "ANF-RELAP Methodology for Pressurized Water Reactors: Analysis of Non-LOCA Chapter 15 Events," Advanced Nuclear Fuels Corporation.

14) EMF-1961(P)(A), "Statistical Setpoint/Transient Methodology for Combustion Engineering Type Reactors," Siemens Power Corporation.

15) EMF-2310(P)(A), "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors," Framatome ANP.

c. The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

d. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, one copy to the Regional Administrator, Region I, and one copy to the NRC Resident Inspector within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Deleted

SPECIAL REPORTS (CONT.)

b. Deleted

c. Deleted

d. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

e. Deleted

f. Deleted

g. RCS Overpressure Mitigation, Specification 3.4.9.3.

h. Deleted

i. Tendon Surveillance Report, Specification 6.25. ~~Degradation of containment structure, Specification 4.6.1.6.4.~~

j. Steam Generator Tube Inspection, Specification 4.4.5.1.5.

k. Accident Monitoring Instrumentation, Specification 3.3.3.8.

l. Radiation Monitoring Instrumentation, Specification 3.3.3.1.

m. Deleted

6.10 Deleted.

b. A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

c. Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

6.22 Reactor Coolant Pump Flywheel Inspection Report

This program shall provide for the inspection of each reactor coolant pump flywheel by either qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius, or a surface examination (magnetic particle testing and/or penetrant testing) of exposed surfaces defined by the volume of the disassembled flywheels at least once every 10 years.

INSERT E

INSERT E - Technical Specifications 6.0 (page 6-28)

## 6.25 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Regulatory Guide 1.35, Revision 3, 1989.

The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

Any abnormal degradation of the containment structure detected during the tests required by the Pre-stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken. This Tendon Surveillance Report is an administrative requirement listed in Technical Specifications 6.9.2, "Special Reports."

Attachment 4

Millstone Nuclear Power Station, Unit No. 2

License Basis Document Change Request 2-17-02
Containment Systems
Retyped Pages

# INDEX

## LIMITING CONDITION FOR OPERATION AND SURVEILLANCE REQUIREMENTS

## ADMINISTRATIVE CONTROLS

CONTAINMENT INTEGRITY

1.8 CONTAINMENT INTEGRITY shall exist when:

1.8.1 All penetrations required to be closed during accident conditions are either:

a. Capable of being closed by an OPERABLE containment automatic isolation valve system,* or

b. Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except for valves that are open under administrative control as permitted by Specification 3.6.3.1,

1.8.2 The equipment hatch is closed and sealed, and

1.8.3 The airlock is in compliance with the requirements of Specification 3.6.1.3.

CHANNEL CALIBRATION

1.9 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds with the necessary range and accuracy to known values of the parameter which the channel monitors. The CHANNEL CALIBRATION shall encompass the entire channel including the sensor and alarm and/or trip functions, and shall include the CHANNEL FUNCTIONAL TEST. The CHANNEL CALIBRATION may be performed by any series of sequential, overlapping or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

1.10 A CHANNEL CHECK shall be the qualitative assessment of channel behavior during operation by observation. This determination shall include, where possible, comparison of the channel indication and/or status with other indications and/or status derived from independent instrument channels measuring the same parameter.

CHANNEL FUNCTIONAL TEST

1.11 A CHANNEL FUNCTIONAL TEST shall be the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

*In MODE 4, the requirement for an OPERABLE containment automatic isolation valve system is satisfied by use of the containment isolation trip pushbuttons.

## 3/4.6 CONTAINMENT SYSTEMS

## 3/4.6.1 PRIMARY CONTAINMENT

### CONTAINMENT INTEGRITY

### LIMITING CONDITION FOR OPERATION

---

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the next 30 hours.

### SURVEILLANCE REQUIREMENTS

---

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations[1] not capable of being closed by OPERABLE containment automatic isolation valves[2] and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions[3], except for valves that are open under administrative control as permitted by Specification 3.6.3.1.

b. At least once per 31 days by verifying the equipment hatch is closed and sealed.

c. By verifying the containment air lock is in compliance with the requirements of Specification 3.6.1.3.

d. After each closing of a penetration subject to type B testing (except the containment air lock), if opened following a Type A or B test, by leak rate testing in accordance with the Containment Leakage Rate Testing Program.

e. Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program.

---

(1) Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed prior to entering MODE 4 from MODE 5, if not performed within the previous 92 days.

(2) In MODE 4, the requirement for an OPERABLE containment automatic isolation valve system is satisfied by use of the containment isolation trip pushbuttons.

(3) Isolation devices in high radiation areas may be verified by use of administrative means.

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3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that the containment peak pressure does not exceed the design pressure of 54 psig during MSLB or LOCA conditions.

The maximum peak pressure is obtained from a MSLB event. The limit of 1.0 psig for initial positive containment pressure will limit the total pressure to less than the design pressure and is consistent with the accident analyses.

3/4.6.1.5 AIR TEMPERATURE

The limitation on containment air temperature ensures that the containment air temperature does not exceed the worst case combined LOCA/MSLB air temperature profile and the liner temperature of 289°F. The containment air and liner temperature limits are consistent with the accident analyses.

The temperature detectors used to monitor primary containment air temperature are located on the 38 ft. 6 in. floor elevation in containment. The detectors are located approximately 6 feet above the floor, on the southeast and southwest containment walls.

3/4.6.1.6 DELETED

## 3/4.6.3 CONTAINMENT ISOLATION VALVES

### LIMITING CONDITION FOR OPERATION

3.6.3.1 Each containment isolation valve shall be OPERABLE.[(1)(2)]

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) inoperable, either:

a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or

b. Isolate the affected penetration(s) within 4 hours by use of a deactivated automatic valve(s) secured in the isolation position(s), or

c. Isolate the affected penetration(s) within 4 hours by use of a closed manual valve(s) or blind flange(s); or

d. Isolate the affected penetration that has only one containment isolation valve and a closed system within 72 hours by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange; or

e. Be in COLD SHUTDOWN within the next 36 hours.

### SURVEILLANCE REQUIREMENTS

4.6.3.1.1 Each isolation valve testable during plant operation shall be demonstrated OPERABLE:

a. At least once per 92 days by:

1. Exercising each power operated valve through one complete cycle of full travel and measuring the isolation time, and

2. Exercising each manual valve, except those that are closed, through one complete cycle of full travel.

b. Immediately prior to returning the valve to service after maintenance, repair or replacement work is performed on the

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(1) Containment isolation valves may be opened on an intermittent basis under administrative controls.

(2) The provisions of this Specification are not applicable for main steam line isolation valves. However, provisions of Specification 3.7.1.5 are applicable for main steam line isolation valves.

3/4.6.2.1 CONTAINMENT SPRAY AND COOLING SYSTEMS (Continued)

pressure measurement instrument inaccuracies are already reflected in the Technical Specification acceptance criteria.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The Technical Requirements Manual contains the list of containment isolation valves (except the containment air lock and equipment hatch). Any changes to this list will be reviewed under 10CFR50.59 and approved by the committee(s) as described in the QAP Topical Report.

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

The containment isolation valves are used to close all fluid (liquid and gas) penetrations not required for operation of the engineered safety feature systems, to prevent the leakage of radioactive materials to the environment. The fluid penetrations which may require isolation after an accident are categorized as Type P, O, or N. The penetration types are listed with the containment isolation valves in the Technical Requirements Manual.

Type P penetrations are lines that connect to the reactor coolant pressure boundary (Criterion 55 of 10CFR50, Appendix A). These lines are provided with two containment isolation valves, one inside containment, and one outside containment.

Type O penetrations are lines that are open to the containment internal atmosphere (Criterion 56 of 10CFR50, Appendix A). These lines are provided with two containment isolation valves, one inside containment, and one outside containment.

Type N penetrations are lines that neither connect to the reactor coolant pressure boundary nor are open to the containment internal atmosphere, but do form a closed system within the containment structure (Criterion 57 of 10CFR50, Appendix A). These lines are provided with single containment isolation valves outside containment. These valves are either remotely operated or locked closed manual valves.

With one or more penetration flow paths with one containment isolation valve inoperable, the inoperable valve must be restored to OPERABLE status or the affected penetration flow path must be isolated. The method of isolation must include the use of at least one isolation barrier that cannot be adversly affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. A check valve may not be used to isolate the affected penetration.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

If the containment isolation valve on a closed system becomes inoperable, the remaining barrier is a closed system since a closed system is an acceptable alternative to an automatic valve. However, actions must still be taken to meet Technical Specification ACTION 3.6.3.1.d and the valve, not normally considered as a containment isolation valve, and closest to the containment wall should be put into the closed position. No leak testing of the alternate valve is necessary to satisfy the action statement. Placing the manual valve in the closed position sufficiently deactivates the penetration for Technical Specification compliance. Closed system isolation valves applicable to Technical Specification ACTION 3.6.3.1.d are included in FSAR Table 5.2-11, and are the isolation valves for those penetrations credited as General Design Criteria 57, (Type N penetrations). The specified time (i.e., 72 hours) of Technical Specification ACTION 3.6.3.1.d is reasonable, considering the relative stability of the closed system (hence, reliability) to act as a penetration isolation boundary and the relative importance of supporting containment OPERABILITY during MODES 1, 2, 3 and 4. In the event the affected penetration is isolated in accordance with 3.6.3.1.d, the affected penetration flow path must be verified to be isolated on a periodic basis, (Surveillance Requirement 4.6.1.1.a). This is necessary to assure leak tightness of containment and that containment penetrations requiring isolation following an accident are isolated. The frequency of once per 31 days in this surveillance for verifying that each affected penetration flow path is isolated is appropriate considering the valves are operated under administrative controls and the probability of their misalignment is low.

For the purposes of meeting this LCO, neither the containment isolation valve, nor any alternate valve on a closed system have a leakage limit associated with valve operability.

Containment isolation valves may be opened on an intermittent basis provided appropriate administrative controls are established. The position of the NRC concerning acceptable administrative controls is contained in Generic Letter 91-08, "Removal of Component Lists from Technical Specifications," and includes the following considerations:

(1) stationing an operator, who is in constant communication with the control room, at the valve controls,

(2) instructing this operator to close these valves in an accident situation, and

(3) assuring that environmental conditions will not preclude access to close the valve and that this action will prevent the release of radioactivity outside the containment.

The appropriate administrative controls, based on the above considerations, to allow containment isolation valves to be opened are contained in the procedures that will be used to operate the valves. Entries should be placed in the Shift Manager Log when these valves are opened and closed. However, it is not necessary to log into any Technical Specification Action Statement for these valves, provided the appropriate administrative controls have been established.

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

If a containment isolation valve is opened while operating in accordance with Abnormal or Emergency Operating Procedures (AOPs and EOPs), it is not necessary to establish a dedicated operator. The AOPs and EOPs provide sufficient procedural control over the operation of the containment isolation valves.

Opening a closed containment isolation valve bypasses a plant design feature that prevents the release of radioactivity outside the containment. Therefore, this should not be done frequently, and the time the valve is opened should be minimized. As a general guideline, a closed containment isolation valve should not be opened longer than the time allowed to restore the valve to OPERABLE status, as stated in the action statement for LCO 3.6.3.1 "Containment Isolation Valves."

A discussion of the appropriate administrative controls for the containment isolation valves, that are expected to be opened during operation in MODES 1 through 4, is presented below.

Manual containment isolation valve 2-SI-463, safety injection tank (SIT) recirculation header stop valve, is opened to fill or drain the SITs and for Shutdown Cooling System (SDC) boron equalization. While 2-SI-463 is open, a dedicated operator, in continuous communication with the control room, is required.

When SDC is initiated, SDC suction isolation remotely operated valves 2-SI-652 and 2-SI-651 (inside containment isolation valve) and manual valve 2-SI-709 (outside containment isolation valve) are opened. 2-SI-651 is normally operated from the control room. While in Modes 1, 2 or 3, 2-SI-651 is closed with the closing and opening coils removed and stored to satisfy Appendix R requirements. It does not receive an automatic containment isolation closure signal, but is interlocked to prevent opening if Reactor Coolant System (RCS) pressure is greater than approximately 275 psia. When 2-SI-651 is opened from the control room, either one of the two required licensed (Reactor Operator) control room operators can be credited as the dedicated operator required for administrative control. It is not necessary to use a separate dedicated operator.

When valve 2-SI-709 is opened locally, a separate dedicated operator is not required to remain at the valve. 2-SI-709 is opened before 2-SI-651. Therefore, opening 2-SI-709 will not establish a connection between the RCS and the SDC System. Opening 2-SI-651 will connect the RCS and SDC System. If a problem then develops, 2-SI-651 can be closed from the control room.

The administrative controls for valves 2-SI-651 and 2-SI-709 apply only during preparations for initiation of SDC, and during SDC operations. They are acceptable because RCS pressure and temperature are significantly below normal operating pressure and temperature when 2-SI-651 and 2-SI-709 are opened, and these valves are not opened until shortly before SDC flow is initiated. The penetration flowpath can be isolated from the control room by closing either 2-SI-652 or 2-SI-651, and the manipulation of these valves, during this evolution, is controlled by plant procedures.

## 3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

The pressurizer auxiliary spray valve, 2-CH-517, can be used as an alternate method to decrease pressurizer pressure, or for boron precipitation control following a loss of coolant accident. When this valve is opened from the control room, either one of the two required licensed (Reactor Operator) control room operators can be credited as the dedicated operator required for administrative control. It is not necessary to use a separate dedicated operator.

The exception for 2-CH-517 is acceptable because the fluid that passes through this valve will be collected in the Pressurizer (reverse flow from the Pressurizer to the charging system is prevented by check valve 2-CH-431), and the penetration associated with 2-CH-517 is open during accident conditions to allow flow from the charging pumps. Also, this valve is normally operated from the control room, under the supervision of the licensed control room operators, in accordance with plant procedures.

A dedicated operator is not required when opening remotely operated valves associated with Type N fluid penetrations (Criterion 57 of 10CFR50, Appendix A). Operating these valves from the control room is sufficient. The main steam isolation valves (2-MS-64A and 64B), atmospheric steam dump valves (2-MS-190A and 190B), and the containment air recirculation cooler RBCCW discharge valves (2-RB-28.2A-D) are examples of remotely operated containment isolation valves associated with Type N fluid penetrations.

MSIV bypass valves 2-MS-65A and 65B are remotely operated MOVs, but while in MODE 1, they are closed with power to the valve motors removed via lockable disconnect switches located at their respective MCC to satisfy Appendix "R" requirements.

Local operation of the atmospheric steam dump valves (2-MS-190A and 190B), or other remotely operated valves associated with Type N fluid penetrations, will require a dedicated operator in constant communication with the control room, except when operating in accordance with AOPs or EOPs. Even though these valves can not be classified as locked or sealed closed, the use of a dedicated operator will satisfy administrative control requirements. Local operation of these valves with a dedicated operator is equivalent to the operation of other manual (locked or sealed closed) containment isolation valves with a dedicated operator.

The main steam supplies to the turbine driven auxiliary feedwater pump (2-MS-201 and 2-MS-202) are remotely operated valves associated with Type N fluid penetrations. These valves are maintained open during power operation. 2-MS-201 is maintained energized, so it can be closed from the control room, if necessary, for containment isolation. However, 2-MS-202 is deenergized open by removing power to the valve's motor via a lockable disconnect switch to satisfy Appendix R requirements. Therefore, 2-MS-202 cannot be closed

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

immediately from the control room, if necessary, for containment isolation. The disconect switch key to power for 2-MS-202 is stored in the Unit 2 control room, and can be used to re-power the valve at the MCC; this will allow the valve to be closed from the control room. It is not necessary to maintain a dedicated operator at 2-MS-202 because this valve is already in the required accident position. Also, the steam that passes through this valve should not contain any radioactivity. The steam generators provide the barrier between the containment and the atmosphere. Therefore, it would take an additional structural failure for radioactivity to be released to the environment through this valve.

Steam generator chemical addition valves, 2-FW-15A and 2-FW-15B, are opened to add chemicals to the steam generators using the Auxiliary Feedwater System (AFW). When either 2-FW-15A or 2-FW-15B is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of these valves is expected during plant startup and shutdown.

The bypasses around the main steam supplies to the turbine driven auxiliary feedwater pump (2-MS-201 and 2-MS-202), 2-MS-458 and 2-MS-459, are opened to drain water from the steam supply lines. When either 2-MS-458 or 2-MS-459 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of these valves is expected during plant startup.

The containment station air header isolation, 2-SA-19, is opened to supply station air to containment. When 2-SA-19 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected for maintenance activities inside containment.

The backup air supply master stop, 2-IA-566, is opened to supply backup air to 2-CH-517, 2-CH-518, 2-CH-519, 2-EB-88, and 2-EB-89. When 2-IA-566 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected in response to a loss of the normal air supply to the valves listed.

The nitrogen header drain valve, 2-SI-045, is opened to depressurize the containment side of the nitrogen supply header stop valve, 2-SI-312. When 2-SI-045 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is only expected after using the high pressure nitrogen system to raise SIT nitrogen pressure.

The containment waste gas header test connection isolation valve, 2-GR-63, is opened to sample the primary drain tank for oxygen and nitrogen. When 2-GR-63 is opened, a dedicated operator, in continuous communication with the control room, is required. Operation of this valve is expected during plant startup and shutdown.

The upstream vent valves for the steam generator atmospheric dump valves, 2-MS-369 and 2-MS-371, are opened during steam generator safety valve set

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

point testing to allow steam header pressure instrumentation to be placed in service. When either 2-MS-369 or 2-MS-371 is opened, a dedicated operator in continuous communication with the control room is required.

The determination of the appropriate administrative controls for these containment isolation valves included an evaluation of the expected environmental conditions. This evaluation has concluded environmental conditions will not preclude access to close the valve, and this action will prevent the release of radioactivity outside of containment through the respective penetration.

The containment purge supply and exhaust isolation valves are required to be sealed closed during plant operation since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Such a demonstration would require justification of the mechanical operability of the purge valves and consideration of the appropriateness of the electrical override circuits. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system. The containment purge supply and exhaust isolation valves are sealed closed by removing power from the valves. This is accomplished by pulling the control power fuses for each of the valves. The associated fuse blocks are then locked. This is consistent with the guidance contained in NUREG-0737 Item II.E.4.2 and Standard Review Plan 6.2.4, "Containment Isolation System," Item II.f.

SPECIAL REPORTS (CONT.)

b. Deleted

c. Deleted

d. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

e. Deleted

f. Deleted

g. RCS Overpressure Mitigation, Specification 3.4.9.3.

h. Deleted

i. Tendon Surveillance Report, Specification 6.25

j. Steam Generator Tube Inspection, Specification 4.4.5.1.5.

k. Accident Monitoring Instrumentation, Specification 3.3.3.8.

l. Radiation Monitoring Instrumentation, Specification 3.3.3.1.

m. Deleted

6.10 Deleted.

b. A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

c. Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

## 6.22 Reactor Coolant Pump Flywheel Inspection Report

This program shall provide for the inspection of each reactor coolant pump flywheel by either qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius, or a surface examination (magnetic particle testing and/or penetrant testing) of exposed surfaces defined by the volume of the disassembled flywheels at least once every 10 years.

## 6.25 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Regulatory Guide 1.35, Revision 3, 1989.

The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

Any abnormal degradation of the containment structure detected during the tests required by the Pre-stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken. This Tendon Surveillance Report is an administrative requirement listed in Technical Specifications 6.9.2, "Special Reports."