

February 13, 2003

Mr. J. A. Price
Site Vice President - Millstone
Dominion Nuclear Connecticut, Inc.
c/o Mr. David W. Dodson
Rope Ferry Road
Waterford, CT 06385

SUBJECT: MILLSTONE POWER STATION, UNIT NO. 2 - ISSUANCE OF AMENDMENT
RE: CONTAINMENT ISOLATION, REACTOR BUILDING CLOSED COOLING
WATER AND SERVICE WATER SURVEILLANCE REQUIREMENTS
(TAC NO. MB4273)

Dear Mr. Price:

The Commission has issued the enclosed Amendment No. 273 to Facility Operating License No. DPR-65 for the Millstone Power Station, Unit No. 2, in response to your application dated February 5, 2002, as supplemented on January 14, 2003.

The amendment revises the surveillance requirements associated with the Containment Isolation Valves (CIVs), Reactor Building Closed Cooling Water (RBCCW) System, and Service Water (SW) System to remove redundant testing requirements that are already addressed by the Inservice Testing Program. Additional changes remove the post maintenance testing requirements associated with the CIVs, revise the wording of the RBCCW and SW Systems Limiting Conditions for Operation, and increase the allowed outage times for the RBCCW and SW Systems.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Richard B. Ennis, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 273 to DPR-65
2. Safety Evaluation

cc w/encls: See next page

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Millstone Power Station
Unit 2

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Millstone Power Station
Unit 2

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DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-336

MILLSTONE POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 273
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the applicant dated February 5, 2002, as supplemented on January 14, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-65 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 273, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance, and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: February 13, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 273

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

3/4 6-15

3/4 6-16

3/4 7-11

3/4 7-12

B 3/4 6-3e

B 3/4 7-3c

- - -

B 3/4 7-4

B 3/4 7-4a

Insert

3/4 6-15

3/4 6-16

3/4 7-11

3/4 7-12

B 3/4 6-3e

B 3/4 7-3c

B 3/4 7-3d

B 3/4 7-4

B 3/4 7-4a

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 273

TO FACILITY OPERATING LICENSE NO. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By application dated February 5, 2002, as supplemented on January 14, 2003, Dominion Nuclear Connecticut, Inc., (the licensee), requested a change to the Millstone Power Station, Unit No. 2 (MP2) Technical Specifications (TSs). The proposed amendment would revise the surveillance requirements (SRs) associated with the Containment Isolation Valves (CIVs), Reactor Building Closed Cooling Water (RBCCW) System, and Service Water (SW) System. The proposed changes would remove redundant testing requirements that are already addressed by the Inservice Testing (IST) Program. Additional proposed changes would remove the post maintenance testing requirements associated with the CIVs, revise the wording of the RBCCW and SW Systems Limiting Conditions for Operation (LCOs), and increase the allowed outage times (AOTs) for the RBCCW and SW Systems. In addition, the TS Bases would be revised to address the proposed changes.

The supplement dated January 14, 2003, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on April 16, 2002 (67 FR 18644).

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The TSs ensure the operational capability of structures, systems and components that are required to protect the health and safety of the public. The Commission's regulatory requirements that are related to the content of the TSs are contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36. That regulation requires that the TSs include items in the following specific categories: (1) safety limits, limiting safety systems settings and limiting control settings (50.36(c)(1)); (2) LCOs (50.36(c)(2)); (3) SRs (50.36(c)(3)); (4) design features (50.34(c)(4)); and (5) administrative controls (50.36(c)(5)).

In general, there are two classes of changes to TSs: (1) changes needed to reflect modifications to the design basis (TSs are derived from the design basis), and (2) voluntary changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TSs over time. This amendment deals with the second class of changes. In determining the acceptability of such changes, the staff interprets the requirements of the current version of 10 CFR 50.36, using as a model the accumulation of generically approved guidance in the improved Standard Technical Specification (STS) NUREGs. For this review the NRC staff used NUREG-1432, Revision 2, "Standard Technical Specifications, Combustion Engineering Plants," dated October 10, 2001. This NUREG incorporates the general guidance and LCO scoping criteria provided by the Commission's "Final Policy Statement on Technical Specification Improvement for Nuclear Power Reactors," published in the *Federal Register* on July 22, 1993 (58 FR 39132) and incorporated in 10 CFR 50.36 effective August 18, 1995.

Within this general framework, licensees may remove material from their TSs on two conditions: (1) the material is not required to be in the TSs based on the staff interpretation of 10 CFR 50.36, including judgements about the level of detail required in the TSs; and (2) there exist suitable alternative regulatory controls for the material. Licensees may revise the remaining TSs to adopt current improved STS format and content provided that plant-specific review supports a finding of continued adequate safety if: (1) the change is editorial, administrative, or provides clarification (i.e., no requirements are materially altered); (2) the change is more restrictive than the licensee's current requirement; or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards. The detailed application of this general framework, and additional specialized guidance, are discussed in Section 3.0 of this Safety Evaluation in the context of the specific proposed changes.

3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's justification for the proposed license amendment as described in Attachment 1 of the licensee's application dated February 5, 2002, and in the supplement dated January 14, 2003. The detailed evaluation below will support the conclusion that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

3.1 TS 3/4.6.3, "Containment Isolation Valves"

The SRs for the CIVs currently read as follows:

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 valve or its associated actuator, control or power circuit by performance of the applicable cycling test, above.
- 4.6.3.1.2 Each isolation valve shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:
- a. Verifying that on a containment isolation test signal, each isolation valve actuates to its isolation position,
 - b. Verifying that on a Containment Radiation-High signal, all containment purge valves actuate to their isolation position,
 - c. Exercising each power operated valve not testable during plant operation, through one complete cycle of full travel and measuring its isolation time, and
 - d. Exercising each manual valve not locked, sealed or otherwise secured in position through at least one complete cycle of full travel.

The proposed changes would essentially replace SRs 4.6.3.1.1 and 4.6.3.1.2 with SR 4.6.3.1 which would read as follows:

- 4.6.3.1 Each containment isolation valve shall be demonstrated OPERABLE:
- a. By verifying the isolation time of each power operated automatic containment isolation valve when tested pursuant to Specification 4.0.5.
 - b. At least once per 18 months by verifying each automatic containment isolation valve that is not locked, sealed or otherwise secured in position, actuates to the isolation position on an actual or simulated actuation signal.

The proposed changes are evaluated as follows:

1. The following changes would be made to SR 4.6.3.1.1:
 - a. SR 4.6.3.1.1 would be renumbered as SR 4.6.3.1. This change is acceptable because it is editorial in nature and would not result in any technical change to the current TS requirements.
 - b. The word "containment" would be added to SR 4.6.3.1 to specify the type of isolation valve this SR addresses. This change is acceptable because it provides clarification and would not result in any technical change to the current TS requirements.
 - c. Current SR 4.6.3.1.1 provides test requirements for CIVs that are testable during plant operation. The phrase "testable during plant operation" would not be retained in proposed SR 4.6.3.1. The proposed testing will be done in accordance with the IST

Program as per proposed SR 4.6.3.1.a (i.e., “when tested pursuant to Specification 4.0.5”). The IST Program determines valve testing frequency based on the ability to test valves during plant operation. Valves testable at power will be tested every 92 days. Valves not capable of testing during plant operation will be tested at cold shutdown or refueling interval frequency. This change is acceptable because it does not change the scope of valves subject to testing or the test frequencies for those valves currently testable during plant operation.

2. The requirements of SR 4.6.3.1.1.a.1 would be relocated to proposed SR 4.6.3.1.a. This would result in the following changes to the current requirements:
 - a. The current test frequency for SR 4.6.3.1.1.a.1 is specified as 92 days. Proposed SR 4.6.3.1.a does not explicitly specify a test frequency but states that the valves will be “tested pursuant to Specification 4.0.5.” As discussed in 1.c above, the IST Program will test valves that are testable during plant operation every 92 days. The proposed change does not result in a change in test frequency and, therefore, is acceptable.
 - b. SR 4.6.3.1.1.a.1 currently requires each power operated valve to be exercised through one complete cycle of full travel and the isolation time to be measured. Proposed SR 4.6.3.1.a will not specify that the valves be stroked through one complete cycle but will still require the isolation time to be verified. Since checking the isolation time will require the valves to be stroked, there would be no change in test performance. Therefore, the proposed change is acceptable.
 - c. Proposed SR 4.6.3.1.a would require each power operated “automatic” CIVs to be tested, while current SR 4.6.3.1.1.a.1 applies to power operated CIVs. Since not all power operated CIVs are automatically operated, the proposed change would reduce the scope of valves covered by the proposed SR. However, the NRC staff finds the proposed change acceptable because the licensee's application states that the IST Program (SR 4.0.5) requires the non-automatic power operated CIVs to be tested since they are classified as safety-related valves. In addition, the proposed change is consistent with STS 3.6.3.5 of NUREG-1432, Revision 2.
3. Current SR 4.6.3.1.1.a.2 would be deleted. This SR requires that manual valves, except those that are closed, to be cycled. The purpose of cycling the manual valves is to assure that they are operable when containment isolation is required. The requirement to cycle manual valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST program includes all valves required to change position for accident mitigation and safe shutdown of the unit. Manual valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. In addition, TS 3/4.6.1, “Primary Containment Integrity,” includes SR 4.6.1.1.a which requires verification every 31 days that the manual valves that are required to be closed during accident conditions are closed. The NRC staff finds that the testing of manual valves required by the IST Program, as well as the existing testing required by SR 4.6.1.1.a, provides reasonable assurance that the manual valves relied on for containment isolation will meet their safety function. On this basis, the staff concludes that the proposed change is acceptable.

4. Current SR 4.6.3.1.1.b would be deleted. This SR requires CIV operability to be verified following valve maintenance, repair or replacement. The licensee's application states that this requirement is not necessary since post maintenance testing of a component following maintenance activities is already required to the extent necessary by plant procedures to ensure that the maintenance activity has not adversely affected component operability. The staff finds that post maintenance testing, as defined by plant procedures, provides adequate controls to ensure CIV operability following maintenance, repair, or replacement. On this basis, the staff concludes that the proposed change is acceptable.
5. The requirements of SRs 4.6.3.1.2.a and 4.6.3.1.2.b would be combined in the proposed SR 4.6.3.1.b. This SR would require verification that all automatic CIVs actuate to the isolation position following an actual or simulated actuation signal. This proposed revision is acceptable because it is an editorial change and will not change the test performance.
6. The requirements of SR 4.6.3.1.2.c would be relocated to proposed SR 4.6.3.1.a. This would result in the following changes to the current requirements:
 - a. The current test frequency for SR 4.6.3.1.2.c is specified as 18 months. Proposed SR 4.6.3.1.a does not explicitly specify a test frequency but states that the valves will be "tested pursuant to Specification 4.0.5." As discussed in 1.c above, the IST Program will test valves not capable of being tested during plant operation at a cold shutdown or refueling interval frequency. The proposed change does not result in a change in test frequency and, therefore, is acceptable.
 - b. SR 4.6.3.1.2.c currently requires each power operated valve to be exercised through one complete cycle of full travel and the isolation time to be measured. Proposed SR 4.6.3.1.a will not specify that the valves be stroked through one complete cycle but will still require the isolation time to be verified. Since checking the isolation time will require the valves to be stroked, there would be no change in test performance. Therefore, the proposed change is acceptable.
 - c. Proposed SR 4.6.3.1.a would require each power operated "automatic" CIVs to be tested, while current SR 4.6.3.1.2.c applies to power operated CIVs. Since not all power operated CIVs are automatically operated, the proposed change would reduce the scope of valves covered by the proposed SR. However, the NRC staff finds the proposed change acceptable because the licensee's application states that the IST Program (SR 4.0.5) requires the non-automatic power operated CIVs to be tested since they are classified as safety-related valves. In addition, the proposed change is consistent with STS 3.6.3.5 of NUREG-1432, Revision 2.
7. Current SR 4.6.3.1.2.d would be deleted. This SR requires that manual valves that are not locked, sealed or otherwise secured in position, to be cycled. The purpose of cycling the manual valves is to assure that they are operable when containment isolation is required. The requirement to cycle manual valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST program includes all valves required to change position for accident mitigation and safe shutdown of the unit. Manual valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. In addition, TS 3/4.6.1, "Primary Containment Integrity," includes SR 4.6.1.1.a

which requires verification every 31 days that the manual valves that are required to be closed during accident conditions are closed. The NRC staff finds that the testing of manual valves required by the IST Program, as well as the existing testing required by SR 4.6.1.1.a, provides reasonable assurance that the manual valves relied on for containment isolation will meet their safety function. On this basis, the staff concludes that the proposed change is acceptable.

3.2 TS 3/4.7.3, "Reactor Building Closed Cooling Water System"

LCO 3.7.3.1 currently reads as follows: "Two independent reactor building closed cooling water loops shall be OPERABLE." The licensee has proposed to delete the word "independent" from the LCO. In addition, the licensee has proposed to revise the LCO action requirement AOT to restore an inoperable RBCCW loop from 48 hours to 72 hours.

SR 4.7.3.1 would also be revised. This SR currently reads as follows:

- 4.7.3.1 Each reactor building closed cooling water system loop shall be demonstrated OPERABLE:
 - a. At least once per 31 days on a STAGGERED TEST BASIS by:
 - 1. Starting (unless already operating) each pump from the control room,
 - 2. Verifying that each pump develops at least 93% of the differential pressure for the applicable flow rate as determined from the manufacturer's Pump Performance Curve.
 - 3. Verifying that each pump operates for at least 15 minutes,
 - 4. Verifying that each loop is aligned to receive electrical power from separate OPERABLE emergency busses.
 - 5. Verifying correct position of all valves servicing safety related equipment that are not locked, sealed or otherwise secured in position, and
 - 6. Exercising all automatically operated valves servicing safety related equipment and testable during plant operation.
 - b. At least once per 18 months by exercising all power operated valves through one complete cycle of full travel.

Proposed SR 4.7.3.1 would read as follows:

- 4.7.3.1 Each reactor building closed cooling water system loop shall be demonstrated OPERABLE:
 - a. At least once per 31 days by verifying each reactor building closed cooling water manual, power operated, and automatic valve in the flow path servicing

safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.

- b. At least once per 18 months by verifying each reactor building closed cooling water automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.
- c. At least once per 18 months by verifying each reactor building closed cooling water pump starts automatically on an actual or simulated actuation signal.

The proposed changes are evaluated as follows:

1. The licensee has proposed to remove the word "independent" from the LCO. As described in Section 9.4 of the MP2 Updated Final Safety Analysis Report (UFSAR), the RBCCW system design requires the two loops to be independent. Removing the word "independent" from the LCO will not affect the design requirement for the loops to be independent. Therefore, the proposed change would not affect the operability requirements for the two RBCCW loops. On this basis, the staff concludes that the proposed change is acceptable.
2. The licensee has proposed to revise the LCO action requirement AOT to restore an inoperable RBCCW loop from 48 hours to 72 hours. A 72-hour AOT is a standard time to restore inoperable safety-related equipment and restoring inoperable equipment within the AOT avoids putting the plant through the unnecessary transients involved in bringing the plant to cold shutdown. In addition, it is consistent with the standard industry guidelines contained in NUREG-1432. The staff concludes that this change is acceptable because the 72-hour AOT allows sufficient time to restore the inoperable loop and avoid unnecessary plant shutdowns.
3. Current SRs 4.7.3.1.a.1, 4.7.3.1.a.2 and 4.7.3.1.a.3 would be deleted. These monthly SRs require checking the RBCCW pumps for proper operation and potential degradation. The licensee's submittal states that since both loops and their associated pumps are normally operating, any potential malfunction or pump degradation should be readily apparent. Pump operation will be verified by the IST Program on a regular interval. The IST Program specifies a minimum test performance interval of 92 days, which may become more frequent based on equipment performance. Current SR 4.7.3.1.a.2 requires that each RBCCW loop be demonstrated operable by verifying that the associated pump develops at least 93% of the differential pressure for the applicable flow rate as determined from the manufacturer's pump performance curve. The purpose of this SR is to test for potential degradation in pump flow performance. Although the American Society of Mechanical Engineers (ASME) Code allows pumps to degrade to 90% flow capacity, the licensee's submittal dated January 14, 2003, states that the IST Program requires a comparison of hydraulic acceptance criteria limits with the safety analysis requirements to ensure degradation below minimum values is not allowed. The staff finds that the IST Program will provide reasonable assurance that the RBCCW pumps are operating properly and have not degraded beyond what is assumed in the MP2 design basis. On this basis, the staff concludes that the proposed changes are acceptable.

4. SR 4.7.3.1.a.4, which verifies that each RBCCW loop is aligned to receive power from a separate emergency bus, would be deleted. This SR is redundant to the provisions of MP2 TS Definition 1.6, "Operable - Operability," which requires normal and emergency power supplies, except as provided by TS 3.0.5. This change is acceptable because it would not result in any technical change to the current TS requirements.
5. Current SR 4.7.3.1.a.5 would be deleted and the requirements relocated to proposed SR 4.7.3.1.a. This SR would require verification that all RBCCW valves in the flow path that are not locked, sealed or otherwise secured in position, are in the correct position. This proposed revision is acceptable because it is an editorial change and will not change the test performance. In addition, the licensee has proposed to change the test frequency from at least once per 31 days on a staggered test basis to at least once per 31 days. Staggered testing requires an RBCCW loop be tested every 15 days (31 days divided by number of loops). The licensee's submittal states that there is no benefit to specifying performance on a staggered test basis (i.e., one loop every 15 days) since the position of the valves in the system (i.e., both loops) is required to be verified every 31 days. The staff concludes that this change is acceptable since it will not result in a change in testing frequency.
6. Current SR 4.7.3.1.a.6 would be deleted. This SR requires that all automatically operating RBCCW valves that service safety-related equipment, and that are testable during plant operation, be exercised on a monthly basis. The requirement to cycle the valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST Program includes all automatically operating RBCCW valves required to change position for accident mitigation and safe shutdown of the unit. Automatically operating valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. The NRC staff finds that the testing of the automatically operating valves required by the IST Program provides reasonable assurance that the RBCCW valves relied on to mitigate design basis events or support safe shutdown conditions will be operable. On this basis, the staff concludes that the proposed change is acceptable.
7. Current SR 4.7.3.1.b would be deleted. This SR requires that all power operated RBCCW valves be cycled every 18 months. The requirement to cycle the valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST Program includes all power operated RBCCW valves required to change position for accident mitigation and safe shutdown of the unit. Power operated valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. The NRC staff finds that the testing of the power operated valves required by the IST Program provides reasonable assurance that the RBCCW valves relied on to mitigate design basis events or support safe shutdown conditions will be operable. On this basis, the staff concludes that the proposed change is acceptable.
8. New SR 4.7.3.1.b would be added. This SR would require verification every 18 months that all automatic valves associated with the RBCCW System actuate to the correct position following an actual or simulated actuation signal. The staff finds that this more restrictive change will provide additional assurance that the RBCCW valves will function as assumed for accident mitigation. On this basis, the staff concludes that the proposed change is acceptable.

9. New SR 4.7.3.1.c would be added. This SR would require verification every 18 months that each RBCCW pump starts automatically on an actual or simulated actuation signal. The staff finds that this more restrictive change will provide additional assurance that the RBCCW pumps will function as assumed for accident mitigation. On this basis, the staff concludes that the proposed change is acceptable.

3.3 TS 3/4.7.4, "Service Water System"

LCO 3.7.4.1 currently reads as follows: "Two independent service water loops shall be OPERABLE." The licensee has proposed to delete the word "independent" from the LCO. In addition, the licensee has proposed to revise the LCO action requirement AOT to restore an inoperable SW loop from 48 hours to 72 hours.

SR 4.7.4.1 would also be revised. This SR currently reads as follows:

- 4.7.4.1 Each service water loop shall be demonstrated OPERABLE:
 - a. At least once per 31 days on a STAGGERED TEST BASIS by:
 1. Starting (unless already operating) each pump from the control room,
 2. Verifying that each pump develops at least 93% of the differential pressure for the applicable flow rate as determined from the manufacturer's Pump Performance Curve.
 3. Verifying that each pump operates for at least 15 minutes,
 4. Verifying that each loop is aligned to receive electrical power from separate OPERABLE emergency busses.
 5. Verifying correct position of all valves servicing safety related equipment that are not locked, sealed or otherwise secured in position, and
 6. Exercising all automatically operated valves servicing safety related equipment and testable during plant operation.
 - b. At least once per 18 months* by exercising all power operated valves through one complete cycle of full travel.
- * Except that the surveillance requirement due no later than May 5, 1994, may be deferred until the next refueling outage, but no later than September 30, 1994, whichever is earlier.

Proposed SR 4.7.4.1 would read as follows:

- 4.7.4.1 Each service water loop shall be demonstrated OPERABLE:
 - a. At least once per 31 days by verifying each service water manual, power operated and automatic valve in the flow path servicing safety related

equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.

- b. At least once per 18 months by verifying each service water automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.
- c. At least once per 18 months by verifying each service water pump starts automatically on an actual or simulated actuation signal.

The proposed changes are evaluated as follows:

1. The licensee has proposed to remove the word "independent" from the LCO. As described in Section 9.7.2 of the MP2 UFSAR, the SW system design requires the two loops (train) to be independent. Removing the word "independent" from the LCO will not affect the design requirement for the loops to be independent. Therefore, the proposed change would not affect the operability requirements for the two SW loops. On this basis, the staff concludes that the proposed change is acceptable.
2. The licensee has proposed to revise the LCO action requirement AOT to restore an inoperable SW loop from 48 hours to 72 hours. A 72-hour AOT is a standard time to restore inoperable safety-related equipment and restoring inoperable equipment within the AOT avoids putting the plant through the unnecessary transients involved in bringing the plant to cold shutdown. In addition, it is consistent with the standard industry guidelines contained in NUREG-1432. The staff concludes that this change is acceptable because the 72-hour AOT allows sufficient time to restore the inoperable loop and avoid unnecessary plant shutdowns.
3. Current SRs 4.7.4.1.a.1, 4.7.4.1.a.2 and 4.7.4.1.a.3 would be deleted. These monthly SRs require checking the SW pumps for proper operation and potential degradation. The licensee's submittal states that since both loops and their associated pumps are normally operating, any potential malfunction or pump degradation should be readily apparent. Pump operation will be verified by the IST Program on a regular interval. The IST Program specifies a minimum test performance interval of 92 days, which may become more frequent based on equipment performance. Current SR 4.7.4.1.a.2 requires that each SW loop be demonstrated operable by verifying that the associated pump develops at least 93% of the differential pressure for the applicable flow rate as determined from the manufacturer's pump performance curve. The purpose of this SR is to test for potential degradation in pump flow performance. Although the ASME Code allows pumps to degrade to 90% flow capacity, the licensee's submittal dated January 14, 2003, states that the IST Program requires a comparison of hydraulic acceptance criteria limits with the safety analysis requirements to ensure degradation below minimum values is not allowed. The staff finds that the IST Program will provide reasonable assurance that the SW pumps are operating properly and have not degraded beyond what is assumed in the MP2 design basis. On this basis, the staff concludes that the proposed changes are acceptable.
4. SR 4.7.4.1.a.4, which verifies that each SW loop is aligned to receive power from a separate emergency bus, would be deleted. This SR is redundant to the provisions of MP2 TS Definition 1.6, "Operable - Operability," which requires normal and emergency power

supplies, except as provided by TS 3.0.5. This change is acceptable because it would not result in any technical change to the current TS requirements.

5. Current SR 4.7.4.1.a.5 would be deleted and the requirements relocated to proposed SR 4.7.4.1.a. This SR would require verification that all SW valves in the flow path that are not locked, sealed or otherwise secured in position, are in the correct position. This proposed revision is acceptable because it is an editorial change and will not change the test performance. In addition, the licensee has proposed to change the test frequency from at least once per 31 days on a staggered test basis to at least once per 31 days. Staggered testing requires a SW loop be tested every 15 days (31 days divided by number of loops). The licensee's submittal states that there is no benefit to specifying performance on a staggered test basis (i.e., one loop every 15 days) since the position of the valves in the system (i.e., both loops) is required to be verified every 31 days. The staff concludes that this change is acceptable since it will not result in a change in testing frequency.
6. Current SR 4.7.4.1.a.6 would be deleted. This SR requires that all automatically operating SW valves that service safety-related equipment, and that are testable during plant operation, be exercised on a monthly basis. The requirement to cycle the valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST Program includes all automatically operating SW valves required to change position for accident mitigation and safe shutdown of the unit. Automatically operating valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. The NRC staff finds that the testing of the automatically operating valves required by the IST Program provides reasonable assurance that the SW valves relied on to mitigate design basis events or support safe shutdown conditions will be operable. On this basis, the staff concludes that the proposed change is acceptable.
7. Current SR 4.7.4.1.b would be deleted. This SR requires that all power operated SW valves be cycled every 18 months. The requirement to cycle the valves would be covered by the testing required by the IST Program. The program would determine which valves need to be tested and the test frequency. The IST Program includes all power operated SW valves required to change position for accident mitigation and safe shutdown of the unit. Power operated valves that are not required to change position are classified as passive valves by the IST Program and are not required to be cycled. The NRC staff finds that the testing of the power operated valves required by the IST Program provides reasonable assurance that the SW valves relied on to mitigate design basis events or support safe shutdown conditions will be operable. On this basis, the staff concludes that the proposed change is acceptable.
8. The footnote (*) associated with SR 4.7.4.1.b would be deleted. The footnote would no longer be necessary because the associated SR would be deleted. In addition, the footnote is no longer valid based on the time limitation of September 30, 1994, stated in the footnote. The staff concludes that this change is editorial in nature, and is, therefore, acceptable.
9. New SR 4.7.4.1.b would be added. This SR would require verification every 18 months that all automatic valves associated with the SW System actuate to the correct position following an actual or simulated actuation signal. The staff finds that this more restrictive change will

provide additional assurance that the SW valves will function as assumed for accident mitigation. On this basis, the staff concludes that the proposed change is acceptable.

10. New SR 4.7.4.1.c would be added. This SR would require verification every 18 months that each SW pump starts automatically on an actual or simulated actuation signal. The staff finds that this more restrictive change will provide additional assurance that the SW pumps will function as assumed for accident mitigation. On this basis, the staff concludes that the proposed change is acceptable.

3.4 Technical Evaluation Summary/Conclusion

Based on the preceding evaluation, the NRC staff concludes that the proposed TS changes are acceptable. The licensee has also proposed to revise the TS Bases to address the proposed changes. The staff has no objections to these Bases changes.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 18644). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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