

50-336



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 19, 1997

Mr. Neil S. Carns
Senior Vice President
and Chief Nuclear Officer
Northeast Nuclear Energy Company
c/o Ms. Patricia A. Loftus
Director - Regulatory Affairs
P.O. Box 128
Waterford, CT 06385

SUBJECT: ISSUANCE OF AMENDMENT RELATING TO RELOCATION OF THE CONTAINMENT ISOLATION VALVES TO THE TECHNICAL REQUIREMENTS MANUAL AND SURVEILLANCE CHANGE- MILLSTONE NUCLEAR POWER STATION, UNIT 2 (TAC NO. M94623)

Dear Mr. Carns:

The Commission has issued the enclosed Amendment No. 210 to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit 2, in response to your application dated May 20, 1997, as supplemented on September 23, 1997.

The amendment changes the Technical Specifications (TSs) by relocating the containment isolation valve (CIV) list from the TSs to the Technical Requirements Manual (TRM) in accordance with Generic Letter 91-08, "Removal of Component Lists from the Technical Specifications." The amendment also changes the surveillance requirement for valves, blind flanges, and deactivated automatic valves located inside the containment that are locked, sealed, or otherwise secured in the closed position from once every 31 days to during each cold shutdown, but no more than once per 92 days. The TS Bases is changed to reflect the relocation of the containment isolation valve list from the TSs to the TRM and discusses the administrative controls for CIV operation in Modes 1 through 4.

The TS requirements relocated to the TRM, which is a licensee-controlled document, shall be controlled by 10 CFR 50.59. A license condition has been added to paragraph 2.C. of the license. The license amendment is effective as of its date of issuance and the implementation of the license amendment shall include the relocation of the TS requirements to the TRM as identified in the enclosed safety evaluation.

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Mr. Neil S. Carns

- 2 -

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,



Daniel G. McDonald Jr., Sr. Project Manager
Special Projects Office - Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosures: 1. Amendment No. 210 to DPR-65
2. Safety Evaluation

cc w/encls: See next page

Mr. Neil S. Carns

- 2 - November 19, 1997

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Sincerely,

Original signed by:

Daniel G. McDonald Jr., Sr. Project Manager
Special Projects Office - Licensing
Office of Nuclear Reactor Regulation

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2. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHEAST NUCLEAR ENERGY COMPANY
THE CONNECTICUT LIGHT AND POWER COMPANY
AND WESTERN MASSACHUSETTS ELECTRIC COMPANY
DOCKET NO. 50-336
MILLSTONE NUCLEAR POWER STATION, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 210
License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Northeast Nuclear Energy Company, et al. (the licensees) dated May 20, 1997, as supplemented on September 23, 1997, 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.

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2. Accordingly, Facility Operating License No. DPR-65 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. 210, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

The license is also amended by adding paragraph (5) to read as follows:

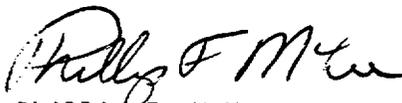
(5) Relocated Technical Specifications

The licensee shall relocate certain technical specification requirements to licensee-controlled documents as described below. The location of these requirements shall be retained by the licensee.

- a. This license condition approves the relocation of certain technical specification requirements to licensee-controlled documents (Technical Requirements Manual), as described in the licensee's application dated May 20, 1997, as supplemented on September 23, 1997. The approval is documented in the staff's safety evaluation dated **November 19, 1997**. This license condition is effective as of its date of issuance by Amendment No. 210 and shall be implemented 90 days from the date of issuance. Implementation shall include the relocation of technical specification requirements to the appropriate licensee-controlled document as identified in the licensee's application dated May 20, 1997, as supplemented on September 23, 1997.

3. The license amendment is effective as of its date of issuance to be implemented within 90 days from the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Phillip F. McKee
Deputy Director for Licensing
Special Projects Office
Office of Nuclear Reactor Regulation

Attachments: 1. Page 4a of License
2. Changes to Technical Specification

Date of Issuance: **November 19, 1997**

(5) Relocated Technical Specifications

The licensee shall relocate certain technical specification requirements to licensee-controlled documents as described below. The location of these requirements shall be retained by the licensee.

- a. This license condition approves the relocation of certain technical specification requirements to licensee-controlled documents (Technical Requirements Manual), as described in the licensee's application dated May 20, 1997, as supplemented on September 23, 1997. The approval is documented in the staff's safety evaluation dated ~~November 19, 1997~~. This license condition is effective as of its date of issuance by Amendment No. 210 and shall be implemented 90 days from the date of issuance. Implementation shall include the relocation of technical specification requirements to the appropriate licensee-controlled document as identified in the licensee's application dated May 20, 1997, as supplemented on September 23, 1997.

- D. This amended license is effective as of its date of issuance and shall expire at midnight, July 31, 2015.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Roger S. Boyd

Roger S. Boyd, Acting Director
Division of Reactor Licensing
Office of Nuclear Reactor Regulation

Enclosures:

1. Incomplete Preoperational Test
Items Which Must be Completed
2. Change No. 4 to Technical
Specifications Contained in
Appendix A to DPR-65

Date of Issuance: September 26, 1975

ATTACHMENT TO LICENSE AMENDMENT NO. 210

FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

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

Remove

1-2

3/4 6-1
3/4 6-15
3/4 6-16
3/4 6-17
3/4 6-18

B 3/4 6-3

License page 4a

Insert

1-2

3/4 6-1
3/4 6-15
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B 3/4 6-3
B 3/4 6-3a
B 3/4 6-3b
B 3/4 6-3c
B 3/4 6-3d

License page 4a

DEFINITIONS

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 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.

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** not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, 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 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.

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

**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.

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 Each containment isolation valve shall be OPERABLE.*

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. 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

*Locked or sealed closed valves may be opened on an intermittent basis under administrative controls.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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.

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CONTAINMENT SYSTEMS

BASES

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

3/4.6.2.1 CONTAINMENT SPRAY SYSTEM

The OPERABILITY of the containment spray system ensures that containment depressurization and cooling capability will be available in the event of a LOCA. The pressure reduction and resultant lower containment leakage rate are consistent with the assumptions used in the accident analyses. The leak rate surveillance requirements assure that the leakage assumed for the system outside containment during the recirculation phase will not be exceeded.

3/4.6.2.2 CONTAINMENT AIR RECIRCULATION SYSTEM

The OPERABILITY of the containment cooling system ensures that 1) the containment air temperature will be maintained within limits during normal operation, and 2) adequate heat removal capacity is available when operated in conjunction with the containment spray systems during post-LOCA conditions.

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 Plant Operations Review Committee (PORC).

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.

CONTAINMENT SYSTEMS

BASES

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

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.

Locked or sealed closed 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 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."

CONTAINMENT SYSTEMS

BASES

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

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. 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 only apply during SDC operation. They are acceptable because RCS pressure and temperature are significantly below normal operating pressure and temperature (the RCS is administratively required to be < 300 °F and < 265 psia before shutdown cooling 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.

CONTAINMENT SYSTEMS

BASES

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

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.

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. 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 the valve closing coil to satisfy Appendix R requirements. Therefore, 2-MS-202 cannot be closed immediately from the control room, if necessary, for containment isolation. The closing coil for 2-MS-202 is stored in the Unit 2 control room, and can be installed to close the valve 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.

CONTAINMENT SYSTEMS

BASES

3/4.6.3 CONTAINMENT ISOLATION VALVES (continued)

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 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 closed and electrically deactivated 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.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 210

TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

THE CONNECTICUT LIGHT AND POWER COMPANY

AND WESTERN MASSACHUSETTS ELECTRIC COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By letter dated May 20, 1997, as supplemented on September 23, 1997, the Northeast Nuclear Energy Company, et al. (the licensee) submitted a request for changes to the Millstone Nuclear Power Station, Unit 2, Technical Specifications (TSs). The changes would relocate the containment isolation valve (CIV) list from the TSs to the Technical Requirements Manual (TRM) in accordance with Generic Letter (GL) 91-08, "Removal of Component Lists from the Technical Specifications." The request would also change the surveillance requirement for valves, blind flanges, and deactivated automatic valves located inside the containment that are locked, sealed, or otherwise secured in the closed position from once every 31 days to during each cold shutdown, but no more than once per 92 days. The TS Bases would be changed to reflect the relocation of the CIV list from the TSs to the TRM and includes the administrative controls for CIV operation in Modes 1 through 4. The September 23, 1997, letter provided clarification relating to two of the CIVs that can be secured from the control room. The additional information did not affect the initial proposed no significant hazards consideration determination.

The affected TS Sections are: TSs 1.8.1.b, 4.6.1.1.a, 3.6.3.1, 4.6.3.1.1, 4.6.3.1.1.b, 4.6.3.1.2, Table 3.6-2, and TS Bases 3/4.6.3.

A license condition has been added to paragraph 2.C. of the Operating License.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act of 1954, as amended (the "Act") requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in 10 CFR 50.36. That regulation requires that the TSs include items in five specific categories, including (1) safety

limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The Commission has provided guidance for the contents of TSs in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TSs to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co. (Trojan Nuclear Plant)*, ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TSs. These criteria were subsequently incorporated into the regulations by an amendment to 10 CFR 50.36, 60 FR 36953 (July 19, 1995). The criteria incorporated into the rule are as follows: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

As a result, existing limiting conditions for operation requirements, which fall within or satisfy any of the criteria, must be retained in the TSs, while those TS requirements, which do not fall within or satisfy these criteria, may be relocated to other licensee-controlled documents.

3.0 EVALUATION

In relation to the first portion of the request, the licensee has proposed that the list of CIVs in TS Table 3.6-2 be removed from the TSs and relocated to the TRM. Any table notations must be relocated to other TSs and references to the table must be deleted when a TS table is removed.

The licensee indicated that the TRM list will contain all of the CIV's specified in the Updated Final Safety Analysis Report (UFSAR) of which the CIVs listed in TS Table 3.6-2 are a subset. UFSAR Section 12-9, "Technical Requirements Manual," indicates that the technical requirements portion

(Section 2.0 of the TRM) is incorporated by reference. It further indicates that changes to the TRM require a 10 CFR 50.59 safety evaluation.

TS Table 3.6-2 has only one notation that allows the manual valves to be opened on an intermittent basis under administrative control. The licensee has proposed that this provision requiring administrative controls be relocated as a footnote to TS 3.6.3.1 and that TS 4.6.1.1.a include a reference to TS 3.6.3.1. TS 1.8.1.b, which defines containment integrity, also is modified to reference the administrative controls referred to in TS 3.6.3.1. The licensee also proposes that the references to TS Table 3.6-2 in TSs 3.6.3.1, 4.6.3.1.1, and 4.6.3.1.2 be deleted.

These proposals are consistent with the guidance in GL 91-08 and are, therefore, acceptable.

TS Table 3.6-2 also specifies the maximum isolation times for the automatic CIVs, which the licensee proposes to remove and will be in the TRM. TS 4.0.5 requires inservice testing (IST), which includes valve stroke times for a broad class of valves including the automatic CIVs. Thus, the IST requirement to verify that the stroke times are within the required limits remains in TS 4.0.5 and the removal of the stroke times specified in the TS table is consistent with the guidance in GL 91-08 and is, therefore, acceptable.

In GL-91-08, the NRC staff restated its position on considerations that constitute an acceptable administrative control for opening normally closed CIVs. The guidance in the GL indicated that the considerations should be stated in the TS Bases. The considerations included: (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 valves and that this action will prevent the release of radioactivity outside of the containment.

The licensee proposes to modify TS Bases Section 3/4.6.3 to identify the appropriate administrative controls for the CIVs that are expected to be opened during operation in Modes 1 through 4.

Eleven CIVs, which will require local operation, are located outside of the containment and are Type N penetrations. Type N penetrations are lines that neither connect to the reactor coolant pressure (RCS) boundary nor are open to the containment internal atmosphere, but do form a closed system within the containment structure. When any of these valves are opened, administrative controls require that a dedicated operator, in continuous communication with the control room, be stationed at the valve.

Three CIV Type P valves, which are valves that connect directly to the RCS, are expected to require limited opening during operation in Modes 1 through 4. Two of the valves are inside containment and one is outside containment. The two valves located inside containment have remote manual operation capability from the control room and receive no automatic signal.

Two of the CIVs are associated with the shutdown cooling (SDC) system and are only opened under administrative controls during SDC when the RCS temperature

is less than 260°F and the pressure is less than 265 psig. This evolution involves a relative short time period of about 3 or 4 hours during which plant conditions are closely monitored until Mode 5 is reached when containment isolation is no longer required.

One of the CIVs is inside containment, is normally operated from the control room, has no automatic isolation signal, and is interlocked to prevent opening when the RCS is greater than 275 psia. The other CIV in the SDC system is located outside containment and is opened locally. This valve is opened before the other valve is opened from the control room and does not establish a path between the RCS and SDC system. Only when the first valve is subsequently opened from the control room is a path between the RCS and SDC system established through the two valves. The licensee proposes not to station a dedicated operator at this location. Normally each of the CIVs are required to be capable of being manually closed independently of each other. However, the licensee indicates that there is another normally open valve located inside of containment that could also be closed from the control room to isolate the penetration should the valve located outside of containment be open for SDC.

Considering the interlocks on the SDC system valves, the limited time periods they would be operated, the relatively low RCS temperature and pressure when the CIV located outside of containment is expected to be opened and the other valve that can be closed, the NRC staff has determined that stationing a dedicated operator at the manual SDC system CIV located outside of the containment is not needed.

The administrative procedures credit one of the two required licensed control room operators, although the operator will not be dedicated, as responsible for manually shutting the CIV from the control room when containment isolation is required. Thus, the process for closure of the CIV with remote manual operation capability from the control room is essentially the same as for the CIVs located outside of containment in that the control room operators make the decision to close the CIVs, do not have to consider the time required to direct another operator to manually close a CIV in a remote location or be concerned about a potentially adverse environment at a remote location. If a problem then develops, the first CIV can be closed remotely from the control room to provide isolation between the RCS and the SDC system.

The other CIV is located inside containment, normally operated from the control room, and is in the pressurizer auxiliary spray system. This CIV is opened as an alternative method to decrease pressurizer pressure, or for boron precipitation control following a loss-of-coolant accident. Any fluid that passes through this CIV is collected in the pressurizer and the CIV is open during accident conditions to allow flow to the charging pumps. Backflow to the charging system is prevented by a check valve. As in the SDC system CIVs, a control room operator is credited for closing the CIV when required.

On the basis of the discussion above, the NRC staff has determined that the CIVs associated with SDC and the pressurizer auxiliary spray system have adequate administrative controls to assure that containment isolation can be achieved when required.

All the CIVs, which require local operation, are located outside containment and are associated with Type N penetrations (except the one SDC system CIV that would not require reclosing as discussed above). The licensee indicated that the CIVs would be accessible immediately following an accident to allow them to be closed. To have an adverse environment in the vicinity of the CIVs, two failures would have to occur. The failure of the containment structure or piping near a CIV and an additional failure in the system associated with the CIV since these CIVs neither connect to the RCS nor are open to the containment atmosphere. Thus, the dedicated operator would be able to close any of the CIVs associated with the Type N penetrations.

The licensee has adequately addressed the guidance provided in GL 91-08 for establishing administrative controls, as discussed above, and proposes changes to TS Bases 3/4.6.3 to reflect the administrative controls, therefore, we find the proposed changes acceptable.

In summary, these requirements, as previously discussed, are not required to be in the TSs under 10 CFR 50.36 or Section 182a of the Act, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall within any of the four criteria set fourth in the Commission's Final Policy Statement and subsequently incorporated into 10 CFR 50.36. Additionally, the NRC staff finds that significant regulatory controls exist under 10 CFR 50.59. Accordingly, the NRC staff has concluded that these requirements may be relocated to the TRM.

The second portion of the request would change the surveillance requirement in TS 4.6.1.1.a for valves (manual), blind flanges, and deactivated automatic CIVs located inside containment that are locked, sealed, or otherwise secured in the closed position from the current requirement of once every 31 days to during each cold shutdown, if they had not been performed within the previous 92 days. The current surveillance requirement in TS 4.6.1.1.a of once per 31 days is applicable for Modes 1, 2, 3, and 4.

The licensee notes that the current requirement in NUREG-1432, "Standard Technical Specifications for Combustion Engineering Plants," indicates that the surveillances for the valves located inside containment be performed prior to entering Mode 4 from Mode 5 if they had not been performed within the previous 92 days. The Bases Section of NUREG-1432 indicates that the 31-day surveillance interval chosen for those CIVs outside containment was based on engineering judgement and the relative ease that visual verification can be made. For those CIVs inside containment, the surveillance interval, prior to entering Mode 4 from Mode 5, if not performed within the previous 92 days, is appropriate since these CIVs are operated under administrative controls and the probability of their misalignment is low. It should also be noted that access to the CIVs located inside containment would be limited during operation in Modes 1, 2, 3, and 4.

Therefore, since the manual CIVs, blind flanges or deactivated CIVs (1) are located inside containment, (2) are locked, sealed, or otherwise secured in the closed position, (3) have limited access during power operation, and (4) are consistent with our current surveillance interval requirements, the NRC staff has determined that the proposed surveillance interval is acceptable.

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 amendment also relates to changes in recordkeeping, reporting, or administrative procedures or 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 (62 FR 33128 dated June 18, 1997). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). 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.

Principal Contributor: D. McDonald

Date: November 19, 1997