Northeast
Nuclear Energy

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The Northeast Utilities System

MAR 14 2000

Docket No. 50-336
B18026

Re: 10 CFR 50.90

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

Millstone Nuclear Power Station, Unit No. 2
Correction to a Request for Additional Information
Proposed Revision to Technical Specifications
Charging and High Pressure Safety Injection Pump
Surveillance Requirements (TAC NO. MA7309)

In a letter dated December 6, 1999,[1] Northeast Nuclear Energy Company (NNECO) requested a change to the Millstone Unit No. 2 Technical Specifications. The proposed changes modify the surveillance requirements for the charging and high pressure safety injection pumps and the associated Bases. In response to this letter, the Nuclear Regulatory Commission (NRC) Staff requested that additional information be added to the proposed Bases change. A revised Bases page was submitted to the NRC by a letter dated February 22, 2000.[2] The revised Bases page contained a minor error. Attachment 1 contains a discussion of the error and a marked up page to illustrate the correction. Attachment 2 provides a retyped page.

The correction to the proposed Bases change does not affect the conclusions of the Safety Summary or the Significant Hazards Consideration, or any of the other changes requested by the letter dated December 6, 1999.

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(1) R. P. Necci letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Proposed Revision to Technical Specifications, Charging and High Pressure Safety Injection Pump Surveillance Requirements," dated December 6, 1999.

(2) R. P. Necci letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Response to a Request for Additional Information Proposed Revision to Technical Specifications, Charging and High Pressure Safety Injection Pump Surveillance Requirements (TAC NO. MA7309)," dated February 22, 2000.

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There are no regulatory commitments contained within this letter.

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

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Raymond P. Necci
Vice President - Nuclear Technical Services

Sworn to and subscribed before me

this 14 day of March, 2000

Donna Lynne Williams
Notary Public

My Commission expires Nov 30, 2001

Attachments (2)

cc: H. J. Miller, Region I Administrator
J. I. Zimmerman, NRC Project Manager, Millstone Unit No. 2
D. P. Beaulieu, 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

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Attachment 1

Millstone Nuclear Power Station, Unit No. 2

Correction to a Request for Additional Information
Proposed Revision to Technical Specifications
Charging and High Pressure Safety Injection Pump
Surveillance Requirements
Discussion and Marked Up Page

March 2000

Correction to a Request for Additional Information
Proposed Revision to Technical Specifications
Charging and High Pressure Safety Injection Pump
Surveillance Requirements

The changes to the Millstone Unit No. 2 Technical Specifications proposed in the letter dated December 6, 1999,[1] modified the surveillance requirements that verify only a specific number of charging and high pressure safety injection (HPSI) pumps are capable of injecting into the Reactor Coolant System (RCS) when the plant is shut down. The current surveillance requirements include the methods by which the charging and HPSI pumps are prevented from injecting into the RCS. The proposed changes relocated the acceptable methods to the respective Technical Specification Bases.

The last paragraph on the previously submitted Bases Page B 3/4 4-7b stated that the specified methods prevent pump starts as a result of a single failure or inadvertent single action. However, one of the methods for the HPSI pumps only shuts and tags the associated pump discharge valve. This method will prevent inadvertent injection, but will not prevent an inadvertent pump start. Therefore, the last paragraph has been changed to state that the specified methods prevent pump injection as a result of a single failure or inadvertent single action.

This correction will not adversely affect the overall purpose of these methods, which is to prevent an inadvertent RCS injection. A new retyped page is provided in Attachment 2.[1]

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(1) R. P. Necci letter to U.S. Nuclear Regulatory Commission, "Millstone Nuclear Power Station, Unit No. 2, Proposed Revision to Technical Specifications, Charging and High Pressure Safety Injection Pump Surveillance Requirements," dated December 6, 1999.

input from the secondary system. They also ensure sufficient steam volume exists in the pressurizer to accommodate the insurge. No credit for PORV actuation was assumed in the LTOP analysis of the energy addition transient.

The restrictions apply only to the start of the first RCP. Once at least one RCP is running, equilibrium is achieved between the primary and secondary temperatures, eliminating any significant energy addition associated with the start of the second RCP.

The LTOP restrictions are based on RCS cold leg temperature. This temperature will be determined by using RCS cold leg temperature indication when RCPs are running, or natural circulation if it is occurring. Otherwise, SDC return temperature indication will be used.

Restrictions on RCS makeup pumping capacity are included in Technical Specification 3.4.9.3. These restrictions are based on balancing the requirements for LTOP and shutdown risk. For shutdown risk reduction, it is desirable to have maximum makeup capacity and to maintain the RCS full (not vented). However, for LTOP it is desirable to minimize makeup capacity and vent the RCS. To satisfy these competing requirements, makeup pumps can be made not capable of injecting, but available at short notice.

A charging pump can be considered to be not capable of injecting into the RCS by use of any of the following methods and the appropriate administrative controls.

1. Placing the motor circuit breaker in the open position.

2. Removing the charging pump motor overload heaters from the charging pump circuit.

3. Removing the charging pump motor controller from the motor control center.

A HPSI pump can be considered to be not capable of injecting into the RCS by use of any of the following methods and the appropriate administrative controls.

1. Racking down the motor circuit breaker from the power supply circuit.

2. Shutting and tagging the discharge valve with the key lock on the control panel (2-SI-654 or 2-SI-656).

3. Placing the pump control switch in the pull-to-lock position and removing the breaker control power fuses.

4. Placing the pump control switch in the pull-to-lock position and shutting the discharge valve with the key lock on the control panel (2-SI-654 or 2-SI-656).

These methods to prevent charging pumps and HPSI pumps from injecting into the RCS, when combined with the appropriate administrative controls, meet the requirement for two independent means to prevent ~~pump starts. The use of these methods prevent~~ pump ~~starts~~ injection as a result of a single failure or inadvertent single action.

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Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Correction to a Request for Additional Information
Proposed Revision to Technical Specifications
Charging and High Pressure Safety Injection Pump
Surveillance Requirements
Retyped Page

March 2000

input from the secondary system. They also ensure sufficient steam volume exists in the pressurizer to accommodate the insurge. No credit for PORV actuation was assumed in the LTOP analysis of the energy addition transient.

The restrictions apply only to the start of the first RCP. Once at least one RCP is running, equilibrium is achieved between the primary and secondary temperatures, eliminating any significant energy addition associated with the start of the second RCP.

The LTOP restrictions are based on RCS cold leg temperature. This temperature will be determined by using RCS cold leg temperature indication when RCPs are running, or natural circulation if it is occurring. Otherwise, SDC return temperature indication will be used.

Restrictions on RCS makeup pumping capacity are included in Technical Specification 3.4.9.3. These restrictions are based on balancing the requirements for LTOP and shutdown risk. For shutdown risk reduction, it is desirable to have maximum makeup capacity and to maintain the RCS full (not vented). However, for LTOP it is desirable to minimize makeup capacity and vent the RCS. To satisfy these competing requirements, makeup pumps can be made not capable of injecting, but available at short notice.

A charging pump can be considered to be not capable of injecting into the RCS by use of any of the following methods and the appropriate administrative controls.

1. Placing the motor circuit breaker in the open position.

2. Removing the charging pump motor overload heaters from the charging pump circuit.

3. Removing the charging pump motor controller from the motor control center.

A HPSI pump can be considered to be not capable of injecting into the RCS by use of any of the following methods and the appropriate administrative controls.

1. Racking down the motor circuit breaker from the power supply circuit.

2. Shutting and tagging the discharge valve with the key lock on the control panel (2-SI-654 or 2-SI-656).

3. Placing the pump control switch in the pull-to-lock position and removing the breaker control power fuses.

4. Placing the pump control switch in the pull-to-lock position and shutting the discharge valve with the key lock on the control panel (2-SI-654 or 2-SI-656).

These methods to prevent charging pumps and HPSI pumps from injecting into the RCS, when combined with the appropriate administrative controls, meet the requirement for two independent means to prevent pump injection as a result of a single failure or inadvertent single action.