

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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(203) 665-5000

May 9, 1988

Docket No. 50-423

A07154

Re: 10CFR2.201

Director, Office of Enforcement
Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Millstone Nuclear Power Station, Unit No. 3
Reply to a Notice of Violation and
Proposed Imposition of Civil Penalty
(Inspection Report No. 50-423/88-03)

On April 12, 1988, the NRC Staff issued a Notice of Violation and Proposed Imposition of Civil Penalty⁽¹⁾ to the Northeast Nuclear Energy Company (NNECO). This action was the result of an inspection conducted on January 19-29, 1988 at Millstone Unit No. 3 to review an event which occurred on January 19, 1988 involving an increase in reactor pressure while the reactor was in cold shutdown.

NRC inspectors reviewed the circumstances associated with a violation of Technical Specification Limiting Condition for Operation 3.4.9.3 identified by NNECO and reported to the NRC. This violation involved a failure to provide proper overpressure protection.

Accordingly, pursuant to 10CFR2.201, NNECO is providing its response to the subject Notice of Violation. This response is included as Attachment 1.

- (1) W. T. Russell letter to E. J. Mroczka, dated April 12, 1988, "Notice of Violation and Proposed Imposition of Civil Penalty" (NRC Inspection Report No. 50-423/88-03).

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After careful consideration of this matter, we have elected not to contest the Proposed Imposition of Civil Penalty and accordingly have enclosed a check in the amount of \$50,000.

In their assessment of the violation, the NRC expressed concern with several deficiencies in control of operations at Millstone Unit No. 3. Specifically, the NRC believes there is a need for (1) better control of the configuration of equipment at this facility, (2) better planning of activities that could affect that control, (3) improved procedures for performing those activities, and (4) improved training of personnel performing those activities.

In order to enhance the control of operations, NNECO has instituted the following changes at several levels within the Millstone Unit No. 3 organization:

Configuration Control

NNECO has initiated a review of General Operating Procedures for other cases where specific directions to remove safety related equipment or place safety related equipment in operation are not governed by a specific system procedure. These procedures will be revised as appropriate.

Planning of Activities

The conduct of maintenance activities dealing with solid state protection systems will be reviewed to ensure that system interactions are identified and properly described in procedures. This will provide to Operating and Maintenance personnel information on specific system interrelationships when removing integrated control systems from service.

Improved Procedures

Procedures will be reviewed to ensure overpressure protection is available when required by Technical Specifications. Procedures will be reviewed or developed to ensure startup or deenergization of solid state protection systems are adequate and provide the necessary warnings of system interactions.

Personnel Training

The policy has been restated that only qualified technicians, trained in solid state protection systems, will work on solid state protection systems. This policy is being reemphasized in operator and maintenance training.

NNECO is committed to achieving and maintaining operational excellence. This can only be achieved by maintaining a high degree of control over plant operations. With improvements in configuration control, activity planning, improved procedures, and personnel training, we are optimistic that any previous difficulties in

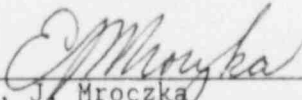
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maintaining control over plant operations will be reduced. We also remain optimistic that future difficulties will be addressed in a timely and effective manner, and that we will continue to maintain a highly skilled, knowledgeable, and dedicated work force. This violation was caused, in part, by the complex nature of the involved systems and the specialized knowledge and training required to understand system interactions. Therefore, if and when we retrofit complex integrated systems on our older units, we will be sensitive to the lessons learned from this event.

We trust you will find our response to the specific violation satisfactory. Should you have any questions concerning the attached information, please contact us.

Very truly yours,

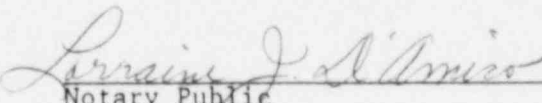
NORTHEAST NUCLEAR ENERGY COMPANY



E. J. Mroczka
Senior Vice President

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Then personally appeared before me, E. J. Mroczka, who being duly sworn, did state that he is Senior Vice President of Northeast Nuclear Energy Company, Licensee herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Licensee herein, and that the statements contained in said information are true and correct to the best of his knowledge and belief.



Notary Public

My Commission Expires March 31, 1993

Enclosure

cc: W. T. Russell, Region I Administrator
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2 and 3
R. L. Ferguson, NRC Project Manager, Millstone Unit No. 3

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Attachment 1

Reply to a Notice of Violation
Millstone Unit No. 3
Northeast Nuclear Energy Company
Inspection Report No. 50-423/88-03

May 1988

Millstone Unit No. 3
Docket No. 50-423
Reply to a Notice of Violation

1. Description of Violation

Technical Specification Limiting Condition for Operation (LCO) 3.4.9.3 requires in part that whenever the reactor is in Mode 5, at least one of the following Overpressure Protection Systems shall be operable:

- a. two residual heat removal (RHR) suction relief valves, each with a setpoint of 450 psig; or,
- b. two power-operated relief valves (PORVs) with lift settings that do not exceed the pressure-temperature limits established by Figures 3.4-4a and 3.4-4b for 4 and 3 loop operation; or,
- c. the reactor coolant system (RCS) depressurized with an RCS vent of greater than or equal to 7.0 square inches.

Technical Specification LCO Action Statement 3.4.9.3.b requires that with both required PORVs inoperable, actions shall be taken within the next eight hours to either restore both RHR suction relief valves to operable status, or depressurize and vent the RCS through a 7 square inch or larger vent.

Contrary to the above, between 9:10 p.m. on January 16, 1988 and 4:49 p.m. on January 19, 1988, with the the reactor in Mode 5 both PORVs were inoperable in the cold overpressure protection mode (i.e., they would not lift at their required low pressure lift settings) and during that time, one of the two RHR suction relief valves had been rendered inoperable for maintenance, and the RCS was not depressurized and vented through at least a 7 square inch or larger vent. The PORVs were inoperable in the cold overpressure protection mode because they rely, in this mode, upon the operability of the Solid State Protection System (SSPS), and the SSPS was inoperable because it was in the test mode.

2. Admission or Denial of Violation

NNECO does not contest the violation as set forth in the Notice of Violation.

3. Reason for Violation

The violation concerns the inoperability of the Cold Overpressure Protection System (COPS) for a period of 3 days and includes concerns over the events that resulted in the isolation of RHR. Several areas were evaluated that contributed to the problem.

- a. No procedure existed for arming COPS. Arming COPS is a single switch actuation and was called out in the general operating procedures. The prerequisites for COPS operability were not explicitly called out. This had not been a problem previously since Solid State Protection System (SSPS) is normally operable when moving through mode changes. In this event, COPS was armed to replace the RHR system as the means of overpressure protection and prerequisites were not explicitly stated.
- b. No direct indication existed in the Control Room. The COPS system indicates armed if the logic is satisfied even though the supporting circuits may not support operability. Due to the lack of procedures, the Control Room indication that is available for SSPS was not directly linked to COPS operability. The licensed operators realizing that SSPS could impact operability requested verification from the instrument department but were incorrectly informed that COPS was not impacted.
- c. The fuse removal that resulted in RHR isolation was performed by a technician working on the steam dump system who was not qualified or properly trained in the complex SSPS circuitry.
- d. The fuse pull was performed without a procedure or an adequate and formal review. The steam dump calibration procedure did not include precautions for this action.

4. Corrective Actions Taken and Results Achieved

Immediate corrective actions taken by NNECO are detailed below:

- a. A procedure for arming COPS has been implemented. This procedure clearly identifies the need for SSPS as a required support system and therefore required by the Technical Specification definition of OPERABLE. No work on SSPS is now permitted while taking credit for the affected train of COPS.

- b. The annunciator response procedures for SSPS trouble, a control board annunciator, now includes the effects on COPS operability.
 - c. The control operators' rounds now monitor SSPS for COPS operability in addition to the armed light and PORV block valve position.
 - d. NNECO has clarified its policy, that only qualified technicians may deenergize all or part of vendor supplied equipment.
 - e. The equipment lineup for declaring COPS operable is independently verified.
 - f. The lessons learned have been discussed with licensed operators and instrument technicians.
 - g. The Technical Specifications have been reviewed regarding SSPS input to COPS. The SSPS is a part of the COPS and consistent with all supporting systems is included by the Technical Specification definition of OPERABLE. Procedures now require SSPS to be completely operable when taking credit for the affected train of COPS.
5. Corrective Actions to Avoid Future Violations

For Millstone Unit No. 3, NNECO is committed to the following corrective actions to prevent recurrence:

- a. Specifics of the event and all new operating procedures and changes to existing operating procedures, resulting from corrective actions described in this attachment, will be evaluated for training impact and all appropriate changes will be incorporated in accordance with the training program modification guidance provided in the Nuclear Training Manual. With regard to the Instrumentation and Control Technician SSPS training course, the lessons learned material will be developed and added to the course requirements prior to its next delivery.
- b. A SSPS procedure will be developed by June 1, 1988 to specifically place SSPS in operation. All other complex logic panels will be reviewed for required procedures by September 1, 1988.
- c. The steam dump calibration procedure will be written prior to its next performance.

- d. A procedure is being developed for response to low temperature overpressure protection. This procedure builds on the successful operator response to the transient initiating this event.
 - e. The General Operating Procedures are being reviewed to ensure that all safety related systems are made operable by a system procedure with appropriate prerequisites.
6. Date When Full Compliance Will Be Achieved

All procedure changes will be implemented by September 1, 1988.