

Northeast
Utilities System

107 Selden Street, Berlin, CT 06037

Northeast Utilities Service Company
P.O. Box 27
Hartford, CT 06141-0270
(860) 665-5323

Ted C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

October 30, 1996

Docket No. 50-213

50-245

50-336

50-423

50-443

B15962

Re.: 10CFR50.109
10CFR50.54(f)

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

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3
Haddam Neck Plant
Seabrook Station
Response to Generic Letter 96-06
Assurance of Equipment Operability and Containment Integrity During
Design-Basis Accident Conditions

In a letter dated September 30, 1996⁽¹⁾, the NRC transmitted Generic Letter (GL) 96-06, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions." The NRC requested that licensees submit a letter within 30 days of the date of the subject GL indicating whether the Requested Actions will be completed and Requested Information will be submitted within 120 days of the date of the GL. Specifically, the GL requests licensees to determine:

⁽¹⁾ T. T. Martin letter dated September 30, 1996, "NRC Generic Letter 96-06: Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions"

A072 1/1

- (1) If containment air cooler cooling water systems are susceptible to either waterhammer or two-phase flow conditions during postulated accident conditions; and
- (2) If piping systems that penetrate containment are susceptible to thermal expansion of fluid so that overpressurization of piping could occur.

The GL requests that Items 1 and 2 above be reviewed based on the plant's postulated accident conditions, as well as with respect to the scenarios referenced in the GL. Operability of affected systems should be assessed and corrective actions taken, as appropriate in accordance with 10CFR50, Appendix B and the plant operating license.

The GL requests licensees to submit the following requested information within 120 days of the date of the GL:

A written summary report stating:

- (1) Actions taken in response to the requested actions,
- (2) Conclusions that were reached relative to susceptibility for waterhammer and two-phase flow in the containment air cooler cooling water system and overpressurization of piping that penetrates containment,
- (3) Basis for continued operability of affected systems and components, as applicable,
- (4) Corrective actions implemented or are planned to be implemented, and
- (5) If systems were found to be susceptible to the conditions discussed in the GL, identify the systems affected and describe the specific circumstances involved.

Accordingly, Millstone Unit Nos. 1 and 2, and Seabrook Station will complete the requested actions and submit the written summary report within 120 days of the date of the Generic Letter (January 28, 1997).

The response to requested actions 1 and 2 for Haddam Neck Plant is provided in Attachment 1. No further actions are planned for Haddam Neck Plant at the present time in response to the GL until a decision has been made with regard to plant restart. A letter will be submitted to the NRC within 120 days of the date of the GL providing a status of Haddam Neck Plant's plan for responding to the GL.

Millstone Unit No. 3 will complete requested action 1 and submit the written summary report for requested action 1 within 120 days of the date of the Generic Letter (January 28, 1997). However, the engineering review of isolated water-filled piping systems that penetrate containment to determine if any piping sections are susceptible to thermally induced overpressurization during Design Basis Accidents (requested action 2) is scheduled to be completed in conjunction with a review of Stress Data Packages (SDP) for Category I piping systems. The review of the SDP's is scheduled to be completed prior to unit startup as part of the unit recovery plan. The course of action outlined above provides an efficient method of complying with the information request given the current shutdown conditions of Millstone Unit No. 3. Therefore, completion of requested action 2 and submittal of the written summary report will be completed prior to Millstone Unit No. 3 startup.

Commitments

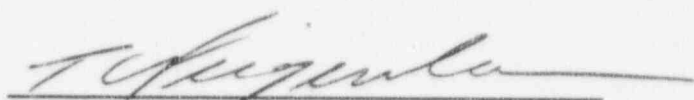
The following are the commitments associated with this letter:

- B15962-1 Within 120 days of the date of the GL, Millstone Unit Nos. 1 and 2, and Seabrook Station will complete the requested actions and submit the requested information to the NRC per the recommendations of Generic Letter 96-06.
- B15962-2 Within 120 days of the date of the GL, Millstone Unit No. 3 will complete requested action 1 and submit the requested information to the NRC per the recommendations of Generic Letter 96-06.
- B15962-3 Within 120 days of the date of the GL, a letter will be submitted to the NRC providing a status of Haddam Neck Plant's plan for responding to the GL.
- B15962-4 Prior to Unit startup, Millstone Unit No. 3 will complete requested action 2 and submit the requested information to the NRC per the recommendations of Generic Letter 96-06.

Should you have any questions regarding this submittal, please contact
Mr. Richard T. Laudenat at (860) 437-5248.

Very truly yours,

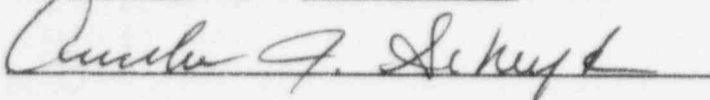
NORTHEAST NUCLEAR ENERGY COMPANY
CONNECTICUT YANKEE ATOMIC POWER COMPANY
NORTH ATLANTIC ENERGY CORPORATION
NORTH ATLANTIC ENERGY SERVICES CORPORATION



T. C. Feigenbaum
Executive Vice President and
Chief Nuclear Officer

Subscribed and sworn to before me

this 30th day of October, 1996



Date Commission Expires: 12/31/96

cc: H. J. Miller, Region I Administrator
W. D. Lanning, Director, Millstone Oversight Team
T. A. Easlick, Senior Resident Inspector, Millstone Unit No. 1
J. W. Andersen, NRC Project Manager, Millstone Unit No. 1
Senior Resident Inspector, Millstone Unit No. 2
D. G. McDonald, Jr., NRC Project Manager, Millstone Unit No. 2
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3
V. L. Rooney, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Haddam Neck Plant
S. Dembek, NRC Project Manager, Haddam Neck Plant
J. B. Macdonald, Senior Resident Inspector, Seabrook Station
A.W. De Agazio, NRC Project Manager, Seabrook Station

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Attachment 1
Haddam Neck Plant
Response to Generic Letter 96-06

October 1996

Requested Action 1

Determine if containment air cooler cooling water systems are susceptible to either water hammer or two phase flow conditions during postulated accident conditions.

Response

The Haddam Neck Plant is susceptible to water hammer and two phase flow as reported to the Nuclear Regulatory Commission in LER 96-013-00 "CAR Fan Service Water Piping Susceptible to Water Hammer"⁽¹⁾. An engineering analysis determined that if a loss of coolant accident (LOCA) or main steam line break inside containment occurred, coincident with a loss of offsite power, the service water piping inside containment, downstream of the Containment Air Recirculation (CAR) fan coolers would reach saturation. Upon restart of the service water pumps, a water hammer could develop that would exceed the structural design of the piping, rendering the CAR fans inoperable.

At the present time, the decision to restart the Haddam Neck Plant is on hold pending a final decision by the joint owners. The plant is currently in cold shutdown and there is no accident for which the CAR fans are required for accident mitigation (LOCA and Main Steam Line Break) in this mode. Modifications will not be implemented unless a decision is made to restart the plant.

Requested Action 2

Determine if piping systems that penetrate containment are susceptible to thermal expansion of fluid so that overpressurization of piping could occur.

Response

This issue will not be investigated under the present plant status as stated above. If a decision is made to restart the plant, a determination whether other piping systems are susceptible to overpressurization will be completed prior to restart.

⁽¹⁾ J. J. LaPlatney letter to the USNRC, dated August 19, 1996, Reportable Occurrence LER 50-213/96-013-00