

December 28, 1990

Docket No. 50-245  
License No. DPR-21  
EA 90-205

Northeast Nuclear Energy Company  
ATTN: Mr. E. J. Mroczka  
Senior Vice President, Nuclear  
Engineering and Operations  
Post Office Box 270  
Hartford, Connecticut 06141-0270

Gentlemen:

SUBJECT: NOTICE OF VIOLATION (NRC Inspection Report No. 50-245/90-83)

This letter refers to the special NRC team inspection conducted on October 1-4, and November 7, 1990, at the Millstone Nuclear Power Station, Unit 1, to assess the potential for flow induced failure of low pressure coolant injection (LPCI) system heat exchanger (HX) tubes during post-accident conditions. The inspection report was sent to you on November 26, 1990. During the inspection, a violation of NRC requirements was identified. On December 4, 1990, an enforcement conference was conducted with Mr. W. Romberg and other members of your staff to discuss the violation, its causes, and your corrective actions.

The violation, which is described in the enclosed Notice, involves the failure to promptly correct this condition. Specifically, during a preliminary engineering assessment conducted as part of the design basis reconstruction (DBR) project in June 1989, a conflict between plant emergency operating procedure (EOPs) directions and the design parameters associated with the LPCI system HX flow rate following a design basis accident was identified. Adherence to the EOPs would result in a 10,000 gpm LPCI flow rate directed through a HX with a maximum design limit of approximately 5,000 gpm. The initial engineering review inappropriately determined that this discrepancy was of low safety significance. Consequently, no corrective action was taken until September 7, 1990, when a reevaluation of this discrepancy was performed during a separate DBR component assessment. Based on this re-evaluation, you determined that operability of the associated LPCI containment cooling subsystem could not be assured due to potential mechanical limitations of the HXs. As a result, you declared the containment cooling systems inoperable and shut down the reactor.

The NRC recognizes that you identified this condition as a result of a comprehensive DBR project at Millstone, and that once the significance of this condition was understood, prompt and comprehensive corrective actions were taken. At the enforcement conference, you indicated that your subsequent

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

OFFICIAL RECORD COPY

CP PKG MILLSTONE 90-205 12/26 - 0001.0.0  
12/27/90

9101070004 901228  
PDR ADOCK 05000245  
Q PDR

LEO  
11

detailed analysis established that the extent of the flow induced damage would not have prevented the LPCI system from fulfilling its containment cooling safety function under any credible accident scenario. However, the NRC is concerned that when the discrepancy was originally identified in June 1989, your DBR program did not ensure that an adequate evaluation was performed to assess the safety significance, nor that a documented basis was prepared to support the initial engineering judgment that the condition was of low safety significance. As a result, the condition was not corrected in a timely manner.

This violation has been classified at Severity Level III. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, (Enforcement Policy) (1990), a civil penalty is normally considered for a Severity Level III violation. However, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, I have decided to exercise discretion under Section V.G.4 of the Enforcement Policy and not propose a civil penalty in this case because you identified the violation as part of an ongoing voluntary formal review effort, and initiated comprehensive corrective action to preclude recurrence. Those corrective actions included prompt shutdown of the reactor, revisions to both the EOPs and normal operating procedures to allow only a single LPCI pump to supply each heat exchanger when in the torus cooling mode, implementation of revised procedures for handling and tracking open items from the DBR project and re-evaluation of all DBR open items to assure prompt corrective measures are taken. This discretion is being exercised notwithstanding a previous civil penalty issued in July 1990 for inadequate corrective action because the violation had already occurred at the time of the July action.

You are required to respond to this letter and should follow the instructions in the enclosed Notice when preparing your response. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room.

The responses directed by this letter and the enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. 96-511.

Sincerely,  
Original Signed By:  
Thomas T. Martin

Thomas T. Martin  
Regional Administrator

Enclosure: Notice of Violation

cc w/encl:

W. D. Romberg, Vice President, Nuclear Operations  
S. E. Scace, Station Superintendent  
D. O. Nordquist, Director of Quality Services  
R. M. Kacich, Manager, Generation Facilities Licensing  
D. B. Miller, Station Superintendent, Haddam Neck  
Gerald Garfield, Esquire  
Public Document Room (PDR)  
Local Public Document Room (LPDR)  
Nuclear Safety Information Center (NSIC)  
NRC Resident Inspector  
State of Connecticut

DISTRIBUTION:

PDR  
 SECY  
 CA  
 JSniezek, DEDR  
 JLieberman, OE  
 TMartin, RI  
 JGoldberg, OGC  
 TMurley, NRR  
 JPartlow, NRR  
 Enforcement Coordinators  
 RI, RII, RIII, RIV, RV  
 FIngram, GPA/PA  
 BHayes, OI  
 VMiller, SP  
 DWilliams, OIG  
 EJordan, AEOD  
 RPederson, OE  
 DHaverkamp, RI  
 Day File  
 EA File  
 DCS

RI:OE  
 Christopher/EB

12/6/90

RO:OE  
 Holody

12/11/90

RI:DRP  
 Haverkamp

12/10/90

RI:DRP  
 Wenzinger

12/10/90

RI:DRS  
 Hodges

12/12/90

RI:DRP  
 Hehl

12/11/90

RI:RC  
 Smith

12/13/90

RI:DRP  
 Kone

12/14/90

Note:  
 Use of enforcement  
 discretion reserved  
 + comment in  
 by Hehl, Kane  
 on 12/21/90  
 JH  
 12/27

RI:PA  
 Madala

12/14/90

OE  
 Lieberman

12/ /90

DEDS  
 Sniezek

12/ /90

Official Record Copy  
 Received by phone  
 from ~~Raymond~~ on  
 12/27/90  
 JYM

PROP EA MILLSTONE1 - 0008.0.0  
 12/07/90