

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
NEW YORK WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHWEST NEW JERSEY ENERGY COMPANY

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June 8, 1979

Docket No. 50-336

Director of Nuclear Reactor Regulation
Attn: Mr. R. Reid, Chief
Operating Reactors Branch #4
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) W. G. Council letter to R. Reid dated May 23, 1979.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2
I&E Bulletin 79-07

In Reference (1), Northeast Nuclear Energy Company (NNECO) responded to a verbal Staff request to address the impact of piping modifications previously described on the High Energy Pipe Break (HEPB) studies documented in the Millstone Unit No. 2 FSAR. Within that submittal, NNECO reported that four of the six piping systems previously identified were not originally subjected to detailed HEPB review, hence, the HEPB study previously docketed remains unaffected by the modifications to those systems. NNECO also reported that an evaluation of the remaining two piping systems, the Nitrogen Addition System and Charging System, was underway, with results to be reported on or about June 8, 1979. NNECO has completed this evaluation and has determined that these two systems remain in conformance with HEPB criteria specified in the Millstone Unit No. 2 FSAR. The basis for this conclusion is described below.

Nitrogen Addition System (Steam Generator Blowdown Lines)

Subsequent to the NRC Staff request for an assessment of the effects of modifications made to the subject system on the HEPB evaluation previously docketed, NNECO had contacted the architect engineer, Bechtel Power Corporation, and requested that an assessment be conducted. Bechtel has completed their evaluation and concluded that the minor changes made do not affect the existing physical separations and break/blowdown characteristics of the steam generator blowdown lines. Hence, the impact upon the HEPB evaluation previously performed is insignificant and the conclusions remain valid.

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Reactor Coolant Charging System

The initial High Energy Pipe Break (HEPB) evaluation of the reactor coolant charging system is reported in Section 5.9 (Amendment 34) of the Millstone Unit No. 2 FSAR. NNECO has investigated the effects of modifications made to the system with regard to effects on the HEPB evaluation reported therein. As reported in Section 5.9.3, the only piping or equipment required for safe shutdown, which is addressed with regard to potential pipe breaks in the charging system piping, is a portion of the high pressure safety injection pump discharge piping (2"-DCB-1) and conduit and cable trays located in the west piping penetration room.

As previously reported, only minor geometry changes were made to the original charging pump discharge piping. The modification to the system involved only a discrete portion of the discharge piping bounded by terminal points. Stress levels and postulated break locations have only been impacted within this discrete section of the piping system. An investigation of the geometry of the charging system discharge piping has shown that the critical portion of the system with regard to HEPB protection is the section from break location RC9 shown on Figure 5.17 of the FSAR to the containment penetration (RC1, Figure 5.16). As reported in Section 5.9.5 of the FSAR, four whip restraints were provided on the charging system discharge piping, in the vicinity of the two-inch high pressure safety injection line. All four whip restraints are on this portion of the charging line. This portion of the line was not modified, reanalyzed, or affected by the modifications to the system. The remainder of the charging system discharge piping is sufficiently distant from the two-inch safety injection piping, such that for any postulated charging line rupture, damage to that piping due to pipe whip is not credible.

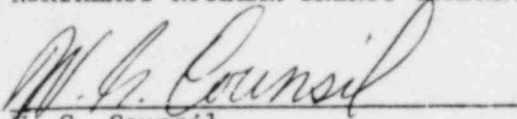
The conclusions made regarding compartmental pressurization and environmental effects in Section 5.9.5 and 5.9.7 of the FSAR are not dependent upon break location; therefore, they have not been impacted by this modification.

Jet impingement is of concern only with respect to effects on cable trays, cables, and conduit located within the west piping penetration room. As previously discussed, this portion of the charging system piping has not been affected by modifications to the charging system. The conclusions made regarding jet impingement effects due to a charging line break therefore remain unaffected by the subject modification.

We trust you find the above information responsive to your verbal request.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



W. G. Council
Vice President

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