

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 10, 1998

Mr. Martin L. Bowling, Jr. Recovery Officer - Technical Services Northeast Nuclear Energy Company c/o Ms. Patricia A. Loftus Director - Regulatory Affairs P. O. Box 128 Waterford, Connecticut 06385

## SUBJECT: MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3 - ALTERNATIVE TO REQUIREMENTS OF ASME CODE SECTION III (TAC NO. MA1799)

Dear Mr. Bowling:

By letter dated May 20, 1998, as supplemented May 29, 1998, you submitted, in accordance with Title 10 of the <u>Code of Federal Regulations</u> (10 CFR) Section 50.55a(a)(3)(i), an alternative to the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME Code), Section III, NC-3677.3, 1971 Edition, Summer 1973 Addenda, for relief valve discharge to a common header.

in the May 20, 1998, letter, you state that ASME Code, Section III, NC-3677.3, provides the requirements for the discharge piping from pressure relief devices. Paragraph (d) of this section of the Code requires that when the discharges of two or more relief valves are combined, "in no case shall the area of such common lines be less than the combined area of all lines discharging into it." At Millstone Unit 3, you state that as-built configurations exist where various systems' relief valves discharge into common headers. In several cases, these common headers are less than the combined area of all lines discharging into them, and this is not in compliance with the requirements of NC-3677.3(d). This issue was discussed in NRC Inspection Report (IR) 50-4 3/97-206, dated December 5, 1997. In the IR, the NRC staff stated that contrary to Articles NC-7512 and NC-3677, you failed to consider possible volume control tank back pressure and that the area of the common discharge lines for certain relief valves was considerably smaller than the required combined area of all lines discharging to it. This issue was found to be an apparent violation of NRC requirements. As a result, you submitted a request for interpretation to the ASME Code to clarify whether the designer can perform a detailed sizing analysis of a relief header system in accordance with the requirements of NC-7512 in lieu of meeting the conservative requirements of NC-3677.3(d).

In the May 20, 1998, letter, you provided the ASME Code interpretation. The ASME Code interpretation states that "the designer can design a relief header system to the requirements of NC-7512 by demonstrating through analysis that adequate system relief capacity is provided. The limitations of NC-3677.3(d) do not apply to relief discharge headers designed to the rules of NC-7512."

The NRC staff has reviewed your request for the NRC to authorize the proposed alternative pursuant to 10 CFR 50.55a(a)(3). The NRC staff finds that ASME Code, Section III requirements for Quality Group B and C components (ASME Code Class 2 and 3 components, respectively) as stated in 10 CFR 50.55a(d) and (e), apply to nuclear power plants whose applications for construction permits (CPs) were docketed after May 14, 1984. The CP for Millstone Unit 3 was docketed prior to May 14, 1984. Therefore, the regulations in 10 CFR 50.55a(e) concerning

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ASME Code, Section III design requirements for Class 2 and 3 components do not apply to Millstone Unit 3. Accordingly, authorization of an alternative to ASME Code, Section III design requirements pursuant to 10 CFR 50.55a(a)(3) is unnecessary and inappropriate for Millstone Unit 3.

In the Millstone Unit 3 Final Safety Analysis Report, you committed to design and construct Millstone Unit 3 in accordance with ASME Code, Section III design provisions. In the May 20, 1998, submittal you identified several common relief valve discharge headers, which are less than the combined area of all lines discharging into them. You stated that this is not in compliance with the requirements of NC-3677.3(d). The NRC staff views the licensee's discovered condition of noncompliance with the ASME Code, Section III design provisions as a deviation from plant licensing commitments. Accordingly, you may either modify the plant to conform to the provisions of the current licensing and design basis information, or change the current licensing and design basis information to accurately reflect the existing plant design. Action may be taken pursuant to the provisions of 10 CFR 50.59; and depending on the results of your evaluation, a license amendment may be required.

On the basis of the preceding evaluation, the NRC staff concludes that authorization of an alternative or relief from ASME Code, Section III design provisions for ASME Code Class 2 and 3 components is unnecessary and inappropriate for Millstone Unit 3. You may resolve the existing deviation by modifying the plant, or by revising the licensing and design information.

If you have any questions related to this matter, please contact James Andersen at (301) 415-1437

Sincerely,

## Original signed by:

Phillip F. McKee Deputy Director for Licensing Special Projects Office Office of Nuclear Reactor Regulation

Docket No. 50-423

cc: See next page

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In the Millstone Unit 3 Final Safety Analysis Report, you committed to design and construct Millstone Unit 3 in accordance with ASME Code, Section III design provisions. In the May 20, 1998, submittal you identified several common relief valve discharge headers, which are less than the combined area of all lines discharging into them. You stated that this is not in compliance with the requirements of NC-3677.3(d). The NRC staff views the licensee's discovered condition of noncompliance with the ASME Code, Section III design provisions as a deviation from plant licensing commitments. Accordingly, you may either modify the plant to conform to the provisions of the current licensing and design basis information, or change the current licensing and design basis information to accurately reflect the existing plant design. Action may be taken pursuant to the provisions of 10 CFR 50.59; and depending on the results of your evaluation, a license amendment may be required.

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If you have any questions related to this matter, please contact James Andersen at (301) 415-1437.

Sincerely,

Phillip F. McKee Deputy Director for Licensing Special Projects Office Office of Nuclear Reactor Regulation

Docket No. 50-423

cc: See next page

Millstone Nuclear Power Station Unit 3

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Millstone Nuclear Power Station Unit 3

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