Maine Yankee
RELIABLE ELECTRICITY SINCE 1972

EDISON DRIVE • AUGUSTA, MAINE 04330 • (207) 622-4868

April 6, 1994
MN-94-34 JRH-94-78

UNITED STATES NUCLEAR REGULATORY COMMISSION
Attention: Document Control Desk
Washington, DC 20555

References:
(a) License No. DPR-36 (Docket No. 50-309)
(b) Letter: MYAPCo to USNRC, "Maine Yankee Inservice Inspection and Inservice Testing Programs for the Third Inspection Interval"; MN-93-13, dated February 2, 1993
(c) Letter: USNRC to MYAPCo, "Request for Additional Information - Maine Yankee Third 10-Year Interval Inspection Program Plan (TAC No. M85887), dated October 20, 1993
(d) Letter: MYAPCo to USNRC, "Response to Request for Additional Information - Maine Yankee Third Interval ISI Program", MN-93-120, dated December 21, 1993

Subject: Submittal of Third Interval ISI Program Relief Requests

Gentlemen:

In accordance with the commitments identified in the above Reference (d), Maine Yankee is submitting three relief requests to the Third Interval ISI Program, Reference (b). These relief requests are attached to this letter.

The specific details of each of these requests have been discussed with members of the staff and the staff's contractor (EG&G) on December 1st and 7th, 1993. Maine Yankee, with these relief requests, has followed the guidance agreed to during those discussions.

Please contact us if you require any additional information or have any additional questions concerning the Maine Yankee ISI program.

Very truly yours,

James R. Hebert

James R. Hebert, Manager
Licensing & Engineering Support Department

RPJ/jag

Attachment

c: Mr. Thomas T. Martin
Mr. J. T. Yerokun
Mr. E. H. Trottier
Mr. Patrick J. Dostie

A047
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Relief Request - 08

CR-01

System: Various

Class: 1, 2, and 3

Categories: B-P, C-H, D-A, D-B, and D-C

Components: Class 1, 2, and 3 Pressure-Retaining Components

Requirement: ASME Section XI 1986 Edition, Paragraph IWA-5242(a), "For systems borated for the purpose of controlling reactivity, insulation shall be removed from the pressure-retaining bolted connections for visual examination VT-2."... (Tables IWB-2500-1, IWC-2500-1, or IWD-2500-1 require a VT-2 (IWA-5240) to be performed in conjunction with the specified pressure test.)

Relief Request: This Relief Request is intended to authorize alternatives to VT-2 system test conditions for those systems containing boron for the purpose of controlling reactivity.

1. Relief is requested from insulation removal and subsequent direct VT-2 examination for those pressure-retaining connections comprised of stainless steel bolting.

2. Relief is requested from performing the direct visual examination of pressure-retaining bolted connections (not mentioned in 1 above) while the system/component is at test pressure.

Basis for Relief:

1. (This basis corresponds to Relief #1 above only).
Maine Yankee requires quality standards for materials (insulation, thread lubricant, boron, etc.) that may come in contact with safety class stainless steel components, including bolting, such that impurities are not present in concentrations that cause stress corrosion cracking (SCC). SCC would not be detected by the VT-2 examination method. The industry has published substantial information, such as EPRI NP-5679, regarding the resistance of stainless steels to boric acid corrosion. Maine Yankee believes that removal of insulation on stainless steel bolting for examination of degradation due to leakage of borated water is an undue hardship and will increase costs and personnel exposures without a compensating increase in the level of quality or safety.

2. (This basis corresponds to Relief #2 above only.)
Leakage of borated water will leave an obvious residue of boron. This boron residue is "evidence of leakage" and inconsequential to the system's pressure at the time of the VT-2 examination.

   Many of these systems are heat traced to enable the plant to maintain high concentrations of boron solution. Insulation removal would require disabling the heat tracing which would be detrimental to the contained solution's fluidity and system function. The heat trace and associated insulation should be removed when the system is not required for operation.

Many other systems are inspected at the conclusion of a refueling outage with the reactor going critical after inspection. To hold up reactor criticality is considered an undue hardship without a compensating increase in the level of quality or safety. The insulation should be removed and replaced when it would not impact critical path or incur unreasonable personnel exposure (ALARA).

Alternate Testing:

1. (This alternate test corresponds to Relief #1 above only.)
Evidence of leakage through insulation at pressure-retaining bolted connections comprised of stainless steel bolting will have its insulation removed and the leakage and bolting evaluated by the Plant Engineering Department (PED) to determine the appropriate corrective action (see Relief Request #9). If insulation is not removed at the time of the pressure test, then the system will be held at test pressure for 4 hours regardless of IWA-5213 requirements.

2. (This alternate test corresponds to Relief #2 above only.)
Insulation will be removed and a direct visual inspection for evidence of leakage at pressure-retaining bolting (not mentioned in 1 above) will be performed at the required frequency; however, the system/component may or may not be at pressure. If insulation is not removed at the time of the pressure test, then the system will be held at test pressure for 4 hours regardless of IWA-5213 requirements.

Relief Request - 09

CR-01

System: Various

Class: 1, 2, and 3

Categories: B-P, C-H, D-A, D-B, and D-C

Components: Class 1, 2, and 3 Pressure-Retaining Components

Requirement: ASME Section XI 1986 Edition, Paragraph IWA-5250(a)(2), ..."if leakage occurs at a bolted connection, the bolting shall be removed, VT-3 examined for corrosion, and evaluated in accordance with IWA-3100;"...

Relief Request: This relief request is intended to authorize alternatives to the removal of bolting at pressure-retaining connections when evidence of leakage is located during system pressure testing.

Relief is requested from verbatim compliance of IWA-5250(a)(2) for removal of bolting from leaking bolted connections to performing corrective action, as deemed necessary by Plant Engineering Department (PED), as determined by evaluation.

Basis for Relief: Maine Yankee does not believe that a generic ASME code requirement for the removal of bolting is reasonable and will cause an undue hardship to the plant without a compensating increase in the level of quality or safety. There are many plausible scenarios which do not warrant removing a system or subsystem from service or potentially shutting down the plant in order to remove bolting that has not been degraded by a leak. The existence of a leak by itself does not justify the use of such potentially extreme measures. There are many other factors that must be considered in order to make a responsible and timely decision. It has been Maine Yankee's experience that factors such as: location of the leak in the plant or system, time in the plant's cycle, leaking medium, materials exposed to leak (not just bolting), Technical Specification limitations, ability to monitor or isolate the leak, ability to redirect or capture the leak, may be important in assessing leakage through pressure-retaining bolted connections.

Maine Yankee believes that removal of bolting at leaking bolted connections is not always a prudent decision and may cause an undue hardship without a compensating increase in the level of quality or safety.

Alternate Testing: The Plant Engineering Department will evaluate evidence of leakage at pressure-retaining bolted connections, considering the applicable variables discussed above, as well as any other impacting considerations, and prescribe the appropriate action. This evaluation methodology has been proven successful at Maine Yankee through the implementation of the Maine Yankee Boric Acid Corrosion Assessment Program (Reference NRC Generic Letter 88-05).

Relief Request - 12

CR-01

System: Various

Safety Class: 2

Category/Items: C-F-1/C5.10

Components: Class 2, Category C-F-1 Piping Welds

Requirement: Note 2 of Table IWC-2500-1, Category C-F-1, requires the examination of a 7.5% sample of pipe welds not exempted by IWC-1220, however, the sample shall be selected only from the pipe welds included in Category C-F-1.

Relief Request: Relief is requested from only selecting the 7.5% sample from the pipe welds included in Category C-F-1 but rather prorate the sample across the entire population not exempted by IWC-1220.

Basis for Relief: When applying the requirements of Category C-F-1, Item C5.10 at Maine Yankee, all of the Containment Spray (CS) System discharge piping and a significant portion of the Low Pressure Safety Injection (LPSI)/Residual Heat Removal (RHR) System discharge piping are excluded from the required 7.5% sample because its nominal wall thickness is less than 3/8". These systems are required to perform in many accident scenarios described in Maine Yankee's Final Safety Analysis Report (FSAR). Also, the RHR System carries significant safety implications during cold shutdowns and refuelings.

Alternate Testing: Perform 7.5% sample selection across the entire category C-F-1, Item C5.10 population not exempted by IWC-1220. The selection will be prorated, to the degree practicable, across systems, terminal ends and structural discontinuities, and line sizes as described by Notes 2(a), (b), and (c), respectively of the Table IWC-2500-1, Category C-F-1. All requirements directed by Table IWC-2500-1, Category C-F-1, Item C5.10 will apply.