

APR 12 1994

Docket No. 50-309

Mr. Charles D. Frizzle
President
Maine Yankee Atomic Power Company
83 Edison Drive
Augusta, Maine 04336

Dear Mr. Frizzle:

SUBJECT: INSPECTION NO. 50-309/90-19

This letter refer to your March 18, 1994 correspondence, in response to our November 6, 1990 letter.

Thank you for informing us of the results of your independent review of compliance with Regulatory Guide 1.97.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:
James C. Linville

James C. Linville, Chief
Projects Branch No. 3
Division of Reactor Projects

cc:

G. Leitch, Vice President, Operations
P. Anderson, Project Manager (Yankee Atomic Electric Company)
R. Blackmore, Plant Manager
L. Diehl, Manager of Public and Governmental Affairs

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Mr. Charles D. Frizzle

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cc w/cy of Licensee's Response Letter:
J. Ritscher, Attorney (Ropes and Gray)
P. Dostie, State Nuclear Safety Inspector
P. Brann, Assistant Attorney General
U. Vanags, Maine State Planning Office
C. Brinkman, Combustion Engineering, Inc.
First Selectmen of Wiscasset
Maine State Planning Officer
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
K. Abraham, PAO (2 copies)
NRC Resident Inspector
State of Maine, SLO Designee

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Mr. Charles D. Frizzle

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bcc w/encl:

Region I Docket Room (with concurrences)

W. Lazarus, DRP

D. Lew, DRP

M. Oprendeck, DRP

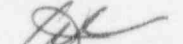
V. McCree, OEDO

E. Trottier, LPM, NRR

W. Butler, NRR

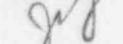
M. Shannon, ILPB

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Maine Yankee

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March 18, 1994
MN-94-18

JRH-94-42

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

References: a) License No. DPR-36 (Docket No. 50-309)
b) USNRC Letter to MYAPCo Dated November 6, 1990
c) USNRC Letter to MYAPCo Dated December 6, 1990
d) MYAPCo Letter to USNRC Dated January 11, 1991 (MN-91-11)
e) MYAPCo Letter to USNRC Dated February 10, 1989 (MN-89-15)
f) USNRC Letter to MYAPCo Dated April 25, 1989

Subject: NRC Inspection No. 90-19, Follow-up Response to Notice of Violation:
Status of the Independent Review of Regulatory Guide 1.97
Implementation.

Gentlemen:

In accordance with Maine Yankee's response to Inspection Report No. 90-19, this letter provides the results of an independent review of Maine Yankee's compliance with Regulatory Guide 1.97. Additionally, the results of the audit of similar technically complex correspondence as submitted to the NRC since 1982 is presented. The audit was in response to a Notice of Violation commitment to ensure the problem with the EQ limit switches and Regulatory Guide 1.97 submittals were an isolated occurrence. The audit did not identify any technically complex correspondence that were not technically accurate and complete.

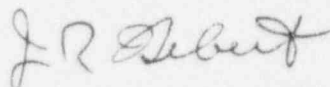
An independent assessment was conducted for Maine Yankee by ASEA Brown Boveri/Combustion Engineering (ABB/CE). The instruments covered by this assessment are post accident monitoring instrumentation identified in Table 3 of Regulatory Guide 1.97, Revision 3. The assessment was based on information identified in Generic Letter 82-33, Supplement 1 to NUREG-0737 and the recommendations of Regulatory Guide 1.97, Revision 3. The attachment to this letter provides the results of this review.

With Reference (d), Maine Yankee found that lack of adequate guidance led to the failure to adequately implement RG 1.97 commitments. Maine Yankee has improved its engineering controls since Inspection Report 90-19. Maine Yankee has also subsequently implemented procedural controls for the performance of technical assessments. These controls require that complex technical assessments, which are relied on in submittals to the NRC, be performed in accordance with written instructions. These controls also address documentation requirements, use of controlled documents and the performance of independent reviews.

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These enhanced procedural controls should prevent the recurrence of problems similar to those encountered with our Reg. Guide 1.97 assessment.

Very truly yours,



J. R. Hebert, Manager
Licensing & Engineering Support Department

JVW/rpc

Attachment

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

Attachment

Maine Yankee's independent assessment found that the following system variables required additional modifications to comply with Regulatory Guide 1.97 commitments.

1) Steam Generator Pressure

This variable had no recording of continuous real time displays, as recommended by RG 1.97. Additionally, the pressure instrumentation lacked independence in that the channels were powered from the same vital bus.

Maine Yankee modified the steam generator pressure instruments to provide independent power supply and recorders during the Cycle 12/13 refueling outage.

2) Reactor Coolant System Pressure

The instrument range did not meet Regulatory Guide 1.97. Maine Yankee installed an ATWS mitigation system during the cycle 12/13 refueling outage which should prevent pressure from exceeding 3250 psia, therefore the existing instruments now conform to the recommendations of RG 1.97 as per Reference (f).

3) Containment Isolation Valve and Emergency Ventilation Damper Position

The Engineering Safeguards Feature (ESF) valve position indicator lights on Channel A & B of ESF lightboxes and Main Control Board (MCB) mounted ECCS lightboxes were not powered from a independent non-1E power sources.

Maine Yankee modified the ECCS light boxes to provide independent power supplies during the Cycle 12/13 refueling outage.

4) Condensate Storage Tank [Demineralized Water Storage Tank (DWST)] Water Level

The instruments supplying DWST level indication are located in a mild environment. The associated cables, however, passed through the containment spray building which could become a harsh environment following an accident, and the cables were not environmentally qualified. Also, the instrumentation channel was not classified as SC-1E.

Maine Yankee replaced the DWST cables with qualified units and upgraded the channel to class 1E during the Cycle 12/13 refueling outage.

5) Containment Sump Water Temperature

Maine Yankee is not equipped with a containment sump temperature monitor. The original RG 1.97 submittal alternative was residual heat removal (RHR) system temperature monitoring which closely follows containment sump temperature following recirculation actuation. It was found, however, that the RG 1.97 monitoring instrument is bypassed on RAS. Maine Yankee has resolved this type D2 variable discrepancy by installing monitoring instrumentation to measure the inlet temperatures to the RHR heat exchangers (E-3A&B). These parameters are displayed in the control room and simultaneously recorded by the plant computer for trending.

Maine Yankee implemented the alternative to the sump temperature indication to qualified status during the Cycle 13/14 refueling outage.

6. Primary Vent Stack (PVS) Noble Gas Monitor

The PVS High Range Noble Gas Monitor's signal/power cable did not appear to meet the EQ requirements and was replaced in the first part of 1993. The PVS Low Range Gas Monitor's cable was not replaced as the monitor would be offscale high before being subjected to the radiation environment during the accident.