

VERMONT YANKEE NUCLEAR POWER CORPORATION

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August 28, 2000
BVY 00-74

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

- References:
- (a) Letter, USNRC to VYNPC, "Request for Information Concerning Use of Code Case N560 – Vermont Yankee Nuclear Power Station," NVY 98-168, dated December 30, 1998.
 - (b) Letter, VYNPC to USNRC, "Response to Request for Information Concerning Use of Code Case N-560 – Vermont Yankee Nuclear Power Station," BVY 99-26, dated March 19, 1999.

**Subject: Vermont Yankee Nuclear Power Station
License No. DPR-28 (Docket No. 50-271)
Follow-up to Request for Information Concerning Use of Code Case N-560**

Reference (a) requested Vermont Yankee (VY) to provide additional information in response to questions outlined in the enclosure to that letter. Reference (b) provided information regarding that request. VY and your Staff had further discussion of our Reference (b) submittal on a June 27, 2000 telecon and this letter is provided as a follow-up to that discussion.

The purpose of this letter is to delineate the various means by which VY Class 1 stainless steel piping welds will be mitigated against Intergranular Stress Corrosion Cracking (IGSCC) by two independent methods, or how it will be addressed by other means. VY replaced all of the Class 1 stainless steel piping in the early to mid-1980's with low carbon material. This is the first mitigation method in all cases. Also, as a part of the pipe replacement, most of these welds were subjected to solution annealing, heat sink welding, or induction heating stress improvement (IHSI). In addition, VY plans to implement noble metal chemical addition (NMCA) and hydrogen water chemistry (HWC), starting in 2001. Therefore, a majority of stainless steel piping welds will have three mitigation methods against IGSCC.

There are two areas where NMCA will not protect Class 1 stainless steel piping. NMCA will not be applied to one 24" line with six stainless steel welds in the Class 1 RHR piping system. Four of these six welds were mitigated by IHSI and the two shop welds by solution annealing. The effectiveness of mitigation for the four welds that were subjected to IHSI will be assessed in accordance with BWRVIP-61. None of these four welds were among those included in the RAI (they were not included in the original ASME Section XI inspection sample selection). NMCA will not protect the Core Spray system and these welds were not mitigated by stress improvement. Thus, Class 1 Core Spray stainless steel welds will only be mitigated by one method (low carbon steel material). However, the inspection sample selection for these Class 1 stainless steel welds will be 25%, which is what would be required by ASME Section XI with no Code Case relief. Moreover, this sample selection is based on an informed prediction of where failure might occur, rather than on a random selection.

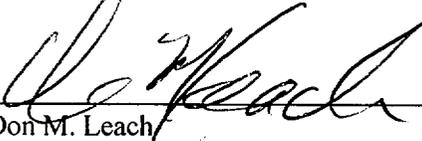
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We trust that the information provided will be satisfactory. However, should you have any questions on this matter, please contact Mr. Jeffrey Meyer at (802) 258-4105.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

A handwritten signature in black ink, appearing to read "D. Leach", is written over a horizontal line.

Don M. Leach
Vice President, Engineering

Attachment

cc: USNRC Region I Administrator
USNRC Resident Inspector - VYNPS
USNRC Project Manager – VYNPS
Vermont Department of Public Service

