

# YANKEE ATOMIC ELECTRIC COMPANY

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October 24, 1990  
BYR 90- 139

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Attention: Mr. Thomas T. Martin  
Region I Administrator

References: (a) License No. DPR-3 (Docket No. 50-29)  
(b) Letter, NRC to YAEC, "Inspection Report No. 50-29/90-04,"  
dated April 30, 1990  
(c) IE Bulletin 79-14, "Seismic Analyses for As-Built  
Safety-Related Piping Systems"

Subject: NRC Inspection 90-21 Regarding Pipe Stress and Pipe Supports

Dear Sir:

Piping and supports were the subject of a recent NRC inspection, Inspection 90-21, conducted at YNPS by Mr. J. Carrasco of Region I. During the inspection, concerns were raised about the promptness of our issuance of pipe support non-conformances and the sample size of a confirmatory inspection of our original IEB 79-14 work. This letter is intended to inform you of the status of our review of safety-class large bore piping and supports at the Yankee Nuclear Power Station (YNPS). We also wish to advise you of our plans to complete all necessary corrective actions which were discussed at the exit interview of Inspection 90-21.

Recently, several Non-Conformance Reports (NCRs) have been issued for pipe supports. Four of these are discussed in Reference (b). With minor exceptions, these NCRs pertained to two piping systems, Safety Injection and Spent Fuel Pool Cooling. Both of these systems were inspected by Yankee as part of our original response to IEB 79-14. All other piping within the bulletin scope at that time, both inside and outside containment, was walked down by a consultant, Cygna Energy Services.

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In May of this year, as a result of the NCRs, we initiated a complete inspection of the Spent Fuel Pool Cooling System piping/supports and Safety Injection System piping/supports outside containment. The inspection was performed by senior level Cygna engineers. The analytical work was performed jointly by Cygna and Yankee. During the field work and throughout the analytical phase, we communicated frequently with the consultant to ensure that system operability was not in question.

The consultant has completed all the field and analytical work and has submitted the reports to Yankee. We have completed our analytical work, which partly consists of a stress analysis of Low Pressure Safety Injection (LPSI) outside containment. That calculation is now being reviewed per the requirements of our engineering procedures. It is anticipated that this review will be completed prior to October 26, 1990. As he requested, we will contact Mr. Carrasco of your office when the calculation review process has been completed.

All piping on both systems which were recently inspected was determined to be in a code allowable stress condition. Although the piping is within code limits, 22 supports were found which require maintenance. Typical corrective actions include upgrading welds, tightening nuts, and adding shims all of which were analyzed and determined not to affect system operability or code compliance. NCRs have been initiated for these supports. These will be evaluated by the Plant Operations Review Committee by October 26, 1990. Maintenance Requests (MRs) which describe the corrective measures for these supports will be written and issued by October 26, 1990. Corrective maintenance will be performed on all of these supports before December 31, 1990.

In Reference (b), the issue of the adequacy of our original IEB 79-14 program was raised (50-29/90-04-01). As a response to that concern, we conducted an independent walkdown of the Pressurizer Surge Line inside containment in August 1990. The results of that walkdown confirmed the validity of the original IEB 79-14 walkdown of that piping by Cygna.

We will conduct a similar verification program on an expanded basis outside containment. Confirmatory walkdowns will commence before the end of the year and will be completed prior to April 1, 1991. The scope of the walkdowns will include representative pipe geometries and support types from various systems. Excluding the Safety Injection and Spent Fuel Pool Cooling piping, which have just been inspected, we will reverify at least ten percent of the original IEB 79-14 scope.

We wish to provide clarification to the statement in Reference (b), Page 12, first paragraph, which states that "safety-related piping outside of the VC were excluded from the 1979 inspection scope even though IEB 79-14 addressed all the safety-related systems." This is not the case. All of the piping outside containment and within the scope of the bulletin, was walked down in response to IEB 79-14 in 1979. Cygna performed this original walkdown, except for the Safety Injection and Spent Fuel Pool Cooling piping which were inspected by Yankee.

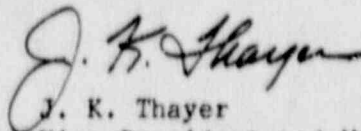
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Yankee has made a technically sound and conscientious effort to resolve pipe support discrepancies. We will continue to advise you, through the Resident Inspector, of our progress in completing support repairs and the sampling inspection outside containment.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY



J. K. Thayer  
Vice President and Manager of Operations

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cc: USNRC Region I  
USNRC Resident Inspector, YNPS