

YANKEE ATOMIC ELECTRIC COMPANY

B.4.1.1

WYR 80-50



20 Turnpike Road Westborough, Massachusetts 01581

May 8, 1980

United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region I
631 Park Ave.
King of Prussia, PA 19406

Attention: Mr. Boyce H. Grier, Director

References: (a) License No. DPR-3 (Docket 50-29)

(b) USNRC Letter to YAEC, dated February 8, 1980

Subject: Response to IE Bulletin No. 80-04

Dear Sir:

Reference (b) requested a review of the main steam line rupture analyses supporting plant operation to determine if the assumptions made in the analyses regarding feedwater system operation were appropriate. Reference (b) specifies four basic concerns. These four concerns are the following:

- 1) Containment pressure response,
- 2) Feedwater system pump (main, condensate, auxiliary) operability,
- 3) Ability to detect and isolate a damaged steam generator, and
- 4) The potential for core return-to-power.

Attachment A provides the results of our review and response to each of the items specified in Reference (b).

Reference (b) requires a proposed corrective action and a schedule for completion of the corrective action, if any are required, as a result of the review. Yankee has identified two of the concerns identified in Reference (b) as possible concerns at Yankee Rowe. At this time it is not clear that these concerns require a design change. However, Yankee will be implementing two design changes that address the concerns of containment overpressurization and potential for return-to-power. These two design

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Page 2

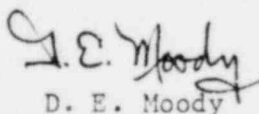
changes are auto tripping of condensate pumps on coincidence high containment pressure and low steam line pressure, and ensured boiler feed pump auto trip at power levels greater than 15 MWe. These two design changes will be implemented during the next refueling outage and before the plant goes back on line, respectively. It is important to note that the design change regarding containment response to a main steam line rupture may not be required to ensure acceptable consequences and the second design change is not necessary to prevent a core return to power transient. However, in both cases, Yankee feels these design changes are prudent since the changes would lessen the severity of a main steam line rupture. Additionally, emergency procedures will be modified to provide additional assurance of feedwater termination to a damaged steam generator.

A significant amount of the content of safety analyses contained in more recent LWR license applications were not required when Yankee Rowe was licensed. However, Yankee has taken additional steps to ensure that the concerns expressed in Reference (b), which are beyond those events considered or analyzed during the Yankee Rowe licensing process, have been addressed as part of our continuing obligation to ensure the health and safety of the public. We believe the information presented herein is both accurate and responsive to your request. A second level review of the supporting analyses is in progress and will be completed shortly. If our continued review identifies any items that alter our conclusions, we will inform you of the findings. Additionally, the main steam line rupture analyses, both core response and containment response, are being addressed by NRC under the Systematic Evaluation Program (SEP). The SEP topics are VI-2.D, VI-3 and XV-2.

We trust you will find this response satisfactory. However, if you have any questions please contact us.

Yours truly,

YANKEE ATOMIC ELECTRIC COMPANY



D. E. Moody
Manager of Operations

JRC/wpc
Attachment