



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 5, 1980

MEMORANDUM FOR: Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

FROM: V. Rooney, Project Manager
Operating Reactors Branch #2
Division of Licensing

SUBJECT: SUMMARY OF MEETING HELD ON OCTOBER 31, 1980 TO DISCUSS
VERMONT YANKEE CORE SPRAY SPARGER CRACKING

On October 31, 1980 representatives of Vermont Yankee Nuclear Power Corporation, Yankee Atomic Electric Company, and General Electric Company met with the NRC staff. Enclosure A lists attendees.

The meeting was for the purpose of discussing a crack discovered in the core spray sparger upper "C" junction box on October 14, 1980 during inspection as required by IE Bulletin 80-13. The crack is circular in shape, about 3 inches long, and appears to have formed along the heat affected zone of a 3/4 inch diameter plug welded into the face of the junction box.

The agenda of the meeting is enclosed as Enclosure B. The licensee described a T-Box Clamp device he planned to install, which would retain the plug in the event of further cracking and minimize flow through the crack. The clamp portion of the device was the same design as had previously been used at Oyster Creek. Discussion of the device included consideration of strength of tack welds used to secure locking caps and plates, possible loose parts considerations, and calculated ECCS performance assuming full through-wall encirclement of the plug by the crack with the clamp device in place.

The staff requested that the licensee:

- 1) Perform a visual examination of the clamp device and core spray header each refueling outage that the clamp device remained in use.
- 2) Provide a report describing the considerations presented in the meeting. In particular this report should address:

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LIST OF ATTENDEES

Vermont Yankee Nuclear Power Corporation

W. Murphy

Yankee Atomic Electric Company

R. White
R. Cunlea
R. Wanczyk
B. Slifer

General Electric Company

L. Gifford
J. Rawlings

NRC

L. Phillips
K. Herring
R. Hermann
T. Huang
V. Rooney

Subject: Core Spray Sparger T-Box Indication
Place: Phillips Building - Bethesda, MD
Time: October 31, 1980; 10:00 a.m.

Participants: W. P. Murphy - Plant Superintendent
B. C. Slifer - Manager, BWR Transient Analysis
R. E. White - Engineer - Mechanical Engineering YAEC
R. J. Wanczyk - Senior Engineer - Operational Projects
R. A. Dunlea - Senior Systems Engineer

AGENDA

- I. Introduction
 - A. Plant Status
 - B. Startup Schedule
- II. Discussion of As-Found Condition
 - A. Description of Sparger/T-Box Assembly
 - B. Location of Indication
 - C. Crack Morphology
- III. T-Box Clamp
 - A. Description/Function
 - B. Installation
- IV. System Hydraulic Characteristics
 - A. Capacity
 - B. Effects on ECCS Analysis
- V. Conclusions
 - A. Corrective Actions



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