

YANKEE ATOMIC ELECTRIC COMPANY



20 Turnpike Road Westborough, Massachusetts 01581

B.3.2.1
WYR 79-132

November 13, 1979

United States Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: D. L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

References: (a) License No. DPR-3 (Docket No. 50-29)
(b) YAEC Letter (WYR 79-116) to USNRC dated October 9, 1979;
Subject: Information on Fire Protection System Design

Dear Sir:

Subject: Additional Information on Fire Protection System Design

After staff review of reference (b) above, it appeared that several further questions needed to be answered. The information required to answer those questions is included in this letter.

1. Drawings

Copies of conceptual drawings for the suppression systems to be added at Yankee Rowe are attached here. Please note that they are marked "FOR INFORMATION ONLY". If these drawings do not fully answer all of the staffs' questions on design, design drawings will be available as system design and installation progresses. The staff can request copies of those that they need at some future date.

2. System Specific details

The answer to several specific questions that the staff had follow here:

Section 3.11 - Fire detection in the containment

We indicated that we planned to use a series of RTD's which were installed throughout the vapor container for use in monitoring VC Leak Rate. After further investigation, we have found that these cannot be used effectively to detect a fire in the containment. Therefore, this item now becomes an open one while we investigate further methods for fire detection in the containment. We hope to develop an usable, practical method within the next two months.

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Section 3.1.5

1. The sprinkler systems are designed and installed to NFPA #13.
2. The deluge systems are designed and installed to NFPA #15.
3. The Auxiliary Heating Boiler System will be designed to a coverage of 0.3 gpm/ft².

Section 3.1.6

1. The Turbine Lube Oil Tank Foam Suppression System will be designed to NFPA #16.
2. It will be actuated by Heat Actuated Devices (HAD's).
3. The system will be designed so that foam hits the tank and rolls down into the diked area. The ends of the tank will be protected.
4. The design discharge rate for the water foam solution will provide a minimum density of 0.16 gpm/ft².

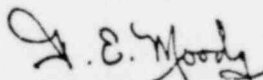
Section 3.1.7 - Halon System

1. The system will be designed to NFPA #12A.
2. The design concentration will be 7% for twenty minutes in the Switchgear Room. The Battery Room concentrations will be 5% for ten minutes.

If you have any question or comment on the above, please contact us.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY



D. E. Moody
Manager of Operations

EAS/dmp

Attachment