YANKEE ATOMIC ELECTRIC COMPANY



2.C.2.1 FYR 83-15

1671 Worcester Road, Framingham, Massachusetts 01701

February 1, 1983

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

Attention:

Office of Nuclear Reactor Regulation

Mr. D. G. Eisenhut, Director

Division of Licensing

References:

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

(b) USNRC Letter to YAEC, dated December 16, 1982

(c) YAEC Letter to USNRC, dated September 1, 1982 (FYR 82-90)

Subject:

Environmental Qualification of Safety-Related Electrical

Equipment

Dear Sir:

Reference (b) transmitted the Safety Evaluation Report (SER) for the environmental qualification of safety-related electrical equipment at the Yankee plant and requested that we provide additional information for the items in NRC categories I.B, II.A, and II.B in the Technical Evaluation Report (TER) enclosed with your letter. This letter forwards the requested information. The responses correspond to the TER item numbers.

CATEGORY I.B - EQUIPMENT QUALIFICATION PENDING MODIFICATION

Item 1 - This valve has been replaced with the qualified equipment identified in Item 2.

Items 7 and 8 - These valve monitors (i.e., acoustic accelerometers) are still under test. Alternatives are being pursued, however, to hasten the qualification process. Until the monitors are qualified, operators have been trained to recognize symptoms of failure of the monitored valves to operate properly.

Item 9 - Testing of the incore thermocouple head connections has not been completed for all connection types. In the interim, six connectors of a type that has been qualified have been installed and provide redundant qualified connections.

Item 16 - This switch in the containment has been removed from service and its function is replaced with electrical components located in a mild environment in the Main Control Room.

 $\overline{\text{Item }31}$ - The penetrations on Class 1E circuits have been replaced by $\overline{\text{Item }32}$ which is qualified.



February 1, 1983 United States Nuclear Regulatory Commission Attention: Mr. Darrell G. Eisenhut Page 2 Item 38 - This item should be assigned to Category III.B (i.e., "not in scope"), as it is in the same mild environment as Items 36, 37, and 39. CATEGORY II.A - EQUIPMENT QUALIFICATION NOT ESTABLISHED Items 4 and 5 - In the previous TER, dated April 20, 1981, FRC evaluated Yankee's documentation and concluded that "based on the overall rugged construction of the units, the successful steam exposure test, and the fact that the radiation exposure is likely to be much less than 20 Mrd because of the plant's licensed power level, operation of the equipment is likely to be satisfactory." Yankee concurs with this evaluation and considers these motor operators to be qualified. Item 6 - Yankee considers this radiation detector to be qualified. The installed method of connection utilizes a qualified cable installed under the supervision of a vendor representative using Victorean Procedure No. 910077. This resolves the concern in the TER relative to the connection interface. Items 18, 24, 29, 30, and 42 - These items are all located outside containment and in a mild environment, except for post-LOCA radiation dose. Qualification of these items is not established in the TER due to insufficient documentation to make a determination. Additional information will be provided in the 90-day response to further substantiate our position that these items are qualified to perform their function. CATEGORY II.B. - EQUIPMENT NOT QUALIFIED Item II - These transmitters have been replaced with fully qualified units as discussed in our letter, Reference (c). We trust this information is satisfactory; however, if you have any questions, please contact us. Very truly yours, YANKEE ATOMIC ELECTRIC COMPANY

Senior Engineer - Licensing

JAK/dd