

DUKE POWER CO.

McGuire Nuclear Station

Report No: SD-369/370-79-12

Date: January 4, 1980

Facility: McGuire Nuclear Station - Units 1 & 2

Identification of Deficiency: RTD Cable  
Insufficient Qualification Data

Description of Deficiency:

During review of the qualification documentation of electrical equipment for the station, it was determined that the qualification data for the insulation of the single conductors within the RTD cables does not support the qualification of the cables for the radiation levels postulated in the containment during an accident condition. The RTD cables are constructed with hypalon as the insulation material<sup>1</sup> and also as an interjacketing material under an outer layer of ar. The application of the cable was for the RTD's for the wide range and narrow range monitors and had only been installed in Unit No. 1.

Analysis of Safety Implications:

The narrow range RTD's would not be expected to be exposed to a LOCA environment and then be required to operate. In any event, other plant monitors would provide primary plant LOCA protection. The wide range RTD's are required for indication after condition II, III and IV events and these indications could be lost.

Corrective Action:

The twenty-five cables installed in Unit No. 1 will be replaced with cables using material which is qualified for the postulated environment. Additionally, written instructions will be issued to the construction site to assure that RTD cables with adequate qualification data are installed in Unit No. 2. It is expected that these actions will be completed by March 1, 1980.

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