

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

October 5, 1978

TELEPHONE AREA 704  
373-4083

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Mr. Robert L. Baer, Chief  
LWR Projects Branch No. 2

Re: McGuire Nuclear Station  
Units 1 and 2  
Docket Nos. 50-369 and 50-370

Dear Mr. Denton:

In the McGuire Safety Evaluation Report, NUREG 0422, one of the remaining outstanding items is the qualification of balance-of-plant and Westinghouse supplied Class 1E equipment.

With regard to the balance-of-plant items, please find attached information concerning the method of termination and the environmental qualification of terminations associated with safety-related equipment located inside containment. Documentation to demonstrate qualification of Limitorque valve operator terminations and limit switch terminations is expected to be available January, 1979 and February, 1979, respectively. This documentation will be provided as it becomes available.

With regard to qualification of Westinghouse supplied Class 1E equipment, the outstanding concern is verification testing of the production run safety-related transmitters to be used inside containment at McGuire. The qualification documentation for the transmitters was submitted to NRC by Westinghouse letter NS-TMA-1950 dated September 29, 1978 from T. M. Anderson to John F. Stolz.

Very truly yours,

*William O. Parker Jr.*  
William O. Parker, Jr.

GAC:scs  
Attachments

LPDR

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DUKE POWER COMPANY

McGUIRE NUCLEAR STATION

Environmental Qualification of Safety-Related  
Terminations Located Inside Containment

The following information describes the method of termination and the qualification of the termination used with each type of safety-related equipment located inside containment.

Electric Penetrations

Cables are terminated to safety-related electric penetrations by use of qualified connectors inside junction boxes. The connectors were tested as part of the penetration. Qualification documentation for these penetration connectors has previously been submitted to the Staff for review.

Transmitters and RTD's

Transmitters and RTD's will be terminated by use of a splice consisting of either a bolted or crimped splice sealed over using Raychem Thermofit shrinkable tubing (Type WCSF-N). Qualification of this splicing method and material for use inside containment is covered in Attachment 1.

Hydrogen Skimmer Fan Motors/Containment Air Return Fan Motors

Hydrogen Skimmer Fan Motors and Containment Air Return Fan Motors will be terminated by use of a bolted splice sealed over using Raychem Thermofit shrinkable tubing (Type WCSF-N). Qualification of this splicing method and material for use inside containment is covered in Attachment 1.

Solenoid Operated Valves

Solenoid operated valves will be terminated by use of a splice sealed over using Raychem Thermofit shrinkable tubing (Type WCSF-N). Qualification of this splicing method and material for use inside containment is covered in Attachment 1.

Limit Switches

Conductors will be terminated within the limit switch assembly. Cable entrance into the limit switch assembly will be sealed using a potting compound. Qualification data for the cable entrance seal will be available in February 1979.

Motor Operated Valve Actuators (Rotork and Limitorque)

Rotork valve actuator terminations are made on a terminal plate inside the operator housing. Qualification of this termination method is included in the Rotork qualification data previously submitted to the Staff in response to Question 223.31 and is supplemented by Attachment 2.

Limiter torque valve operator terminations consist of terminal connections for indication circuits and splices for the power connections. The terminal connections were qualified with the operator. Qualification documentation for the terminal connections is expected to be available in January 1979. The spliced power connections will be sealed over with Raychem Thermofit shrinkable tubing (Type WCSF-N). Qualification of the splicing method and material for use inside containment is covered in Attachment 1.