



Wisconsin Electric POWER COMPANY
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April 27, 1984

Mr. H. R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. NUCLEAR REGULATORY COMMISSION
Washington, D. C. 20555

Attention: Mr. J. R. Miller, Chief
Operating Reactors, Branch 3

Gentlemen:

DOCKET NOS. 50-266 AND 50-301
RESPONSE TO 10 CFR 50 APPENDIX R
ALTERNATE SHUTDOWN CAPABILITY
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Our April 4, 1984 letter provided clarification of our proposed method to prevent spurious operation of the excess letdown isolation valves for Point Beach Nuclear Plant, Units 1 and 2. A double break circuit was proposed which would require two separate shorts in two cables in order to allow spurious valve operation. One short would have to occur between a specific non-energized conductor and a conductor within the same cable or a different cable which is energized at 120 VAC with respect to plant ground. A second short would also be required between a second specific conductor and plant ground either directly or by short to another grounded conductor. Although we consider the postulated double short described above to be an incredible event, the following additional clarification is provided in response to an April 23 request by Mr. T. G. Colburn of your staff.

The proposed double break circuit modification is shown on the attached Figure 4-9B. In the depicted arrangement power to one side of the MOV opening coil is provided via a single conductor cable 1327JD (wire number 0). This conductor is normally de-energized when the valve is in the closed position. The other side of the MOV opening coil is connected to plant ground via a single conductor cable 1327JE (wire number X2B). This conductor is normally isolated from plant ground when the valve is in the closed position. Both of the following must occur to result in the spurious opening of this valve due to a postulated fire affecting both cables:

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1. Wire "0" (cable 1327JD) between the control board and the motor control center must short to a conductor of another cable which is energized at approximately 120 VAC.
2. Wire "X2B" (cable 1327JE) between the control board and the motor control center must short to a conductor of another cable which is connected to plant ground or to plant ground directly.

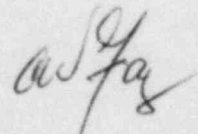
Cables 1327JD and 1327JE will be a Rockbestos-type "Firezone CRC" cable or equivalent. Manufacturer's data indicate that this cable maintains an insulation resistance in excess of 10,000 ohms when exposed to a direct 2000°F flame as proven by passing the 2000°F gas flame test with continuing vibration as specified in MIL-W-25038E with the time extended to 60 minutes and the minimum IR increased to 10,000 ohms.

The above description and Figure 4-9B are for the Unit 1 excess letdown valve. The Unit 2 excess letdown valve wiring will be in the same configuration.

With this configuration the potential for double short occurrence is even less credible than for the original proposed modification. In the alternate shutdown scenario, described in our October 27, 1983 submittal, the motor control center which provides power to the excess letdown valves is tripped off within about 15 minutes of fire initiation. The installation of cable which has been demonstrated to be fire resistant for one hour virtually negates any possibility for spurious letdown valve operation due to a fire causing simultaneous shorts between two different sets of cables.

Should you have additional questions regarding this clarification please contact us.

Very truly yours,



Vice President-Nuclear Power

C. W. Fay

Attachment

Copy to NRC Resident Inspector

