

ATTACHMENT TO LICENSEE EVENT REPORT NO. 79-002/03L-0

Wisconsin Electric Power Company
Point Beach Nuclear Plant Unit 2
Docket No. 50-301

While performing the bi-weekly test of the Unit 2 reactor trip breakers at 1100 hours, February 27, 1979, several seconds elapsed following the application of a trip signal before the "A" breaker tripped. Subsequent investigations disclosed a faulty reactor trip relay (RT-3).

The relay, a Westinghouse Catalog No. BFD 31 (DC), failed to drop out promptly due to excessive plunger-to-sleeve friction resulting from sleeve deterioration. The high temperatures of operation of this normally energized relay had caused the nylon sleeve in the center of the coil to deteriorate and crack. Interference between the cracked sleeve and the solenoid plunger prevented the relay from promptly dropping out.

The relay was replaced at 1115 hours, February 27, 1979, and a retest was satisfactorily performed.

A similar event occurred July 5, 1978 (Licensee Event Report No. 78-008/03L-0) in which a reactor trip relay failed to drop out due to nylon sleeve deterioration. This previous failure prompted the decision to replace all relays of this type associated with the reactor trip system. The Unit 1 relays were replaced during its 1978 fall refueling. The Unit 2 relays will be replaced as soon as practicable.

The new relays will be the type recommended by Westinghouse in their technical bulletin NSD-TB-76-16. Westinghouse's new BFD relays are designed to correct both coil-sleeve deformation and pin hang-up problems. The coil bobbin material being a thermosetting material as opposed to a thermoplastic specification is more suited for use at a much higher temperature. The magnet anti-stick disks which ensure that residual magnetism will not allow the relay to remain closed is soldered in as opposed to epoxied. The armature pin is epoxied to the cross bar to eliminate any chance of rubbing on the external case and causing a relay malfunction.

7903280354

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CON'TEVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)7 8

0	9
---	---

7 87 8

1	2
---	---

2	3
---	---

1	2
---	---

2 8

PHONE: 414/277-2121