

Commonwealth Edison Company

ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS

Address: Reply to

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Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
March 17, 1972

60-249

Dr. Peter A. Morris
Division of Reactor Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

SUBJECT: LICENSE DPR-25, DRESDEN NUCLEAR POWER STATION UNIT #3,
SECTION 6.6.B.2 OF THE TECHNICAL SPECIFICATIONS

Dear Dr. Morris:

This is to report a condition relating to the operation of the station when, during monthly surveillance testing of the Low Pressure Coolant Injection System (LPCI), a wiring error was found in the logic circuitry which provides a permissive to utilize containment sprays under accident conditions, provided reactor water level is greater than 2/3 core height.

PROBLEM AND INVESTIGATION

On March 7, 1972, at 1500 hours, while conducting monthly surveillance tests on the Low Pressure Coolant Injection System (LPCI), a containment spray interlock relay (1530-110AW) would not energize. This relay provides permissive to utilize containment spray if reactor water level is greater than 2/3 core height. Investigation revealed that one side of the relay was wired such that the "LPCI System low flow" switch, (3-1501-58B) was included in the relay circuit, contrary to the wiring diagram. (Refer to attached schematic.)

The "LPCI System low flow" switch contact is normally closed when the surveillance test is conducted. During this particular surveillance testing, however, the "low flow" switch calibration had drifted and the contact on this switch was open. This resulted in the de-energization of relay 1530-110AW. The drift in the calibration of the "low flow" switch was thus responsible for the events which led to the discovery of the wiring error. This also explains the fact that this wiring error was not detected during previous surveillance testing. *no preps*

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March 17, 1972

A review of the construction and preoperational tests indicated that the relay was tested, but not with the LPCI pumps running and hence with the LPCI System low flow switch open. These facts explain why the wiring error was not detected during the construction and preoperational test phases.

It should be noted that the LPCI Subsystem was always operable during the period when the wiring error existed. The effect of this wiring error was only to prohibit a permissive signal to spray the containment when the reactor water level was higher than the two-thirds core height position during an accident condition. This operation, in spite of the wiring error, could have been performed by means of a bypass switch which is part of this subsystem. In addition, it was determined that there was no safety significance related to the calibration drift of the low flow switch. (These switches are calibrated routinely.)

The circuits on similar relays on the corresponding subsystems on Dresden Units 2 and 3 were checked and found to be wired properly.

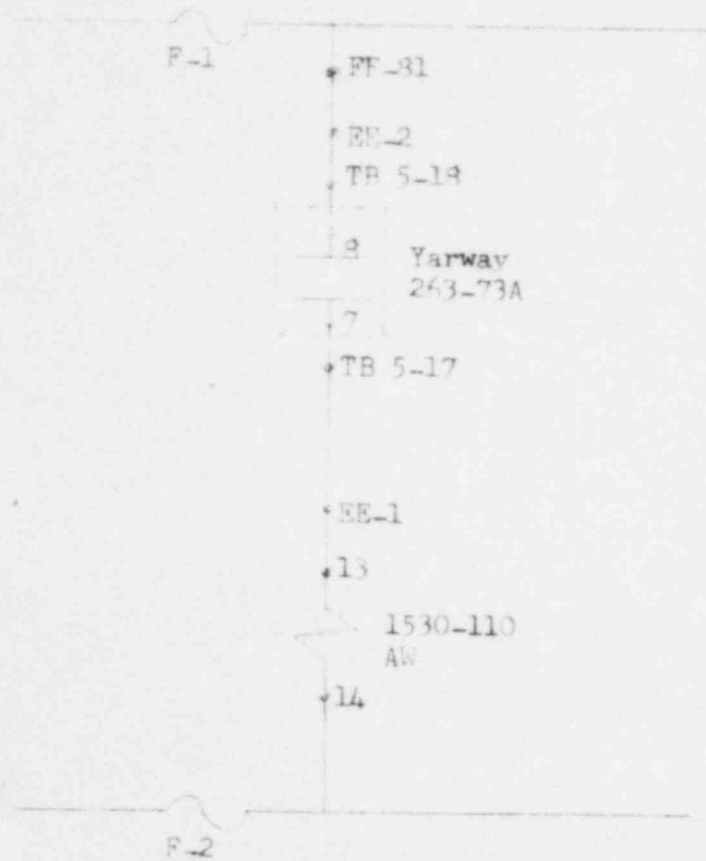
CORRECTIVE ACTION

The wiring circuit for relay 1530-110AW was changed to correspond with that on the wiring diagram and the "LPCI System low flow" switch was recalibrated. The required surveillance test was repeated satisfactorily following the wiring change.

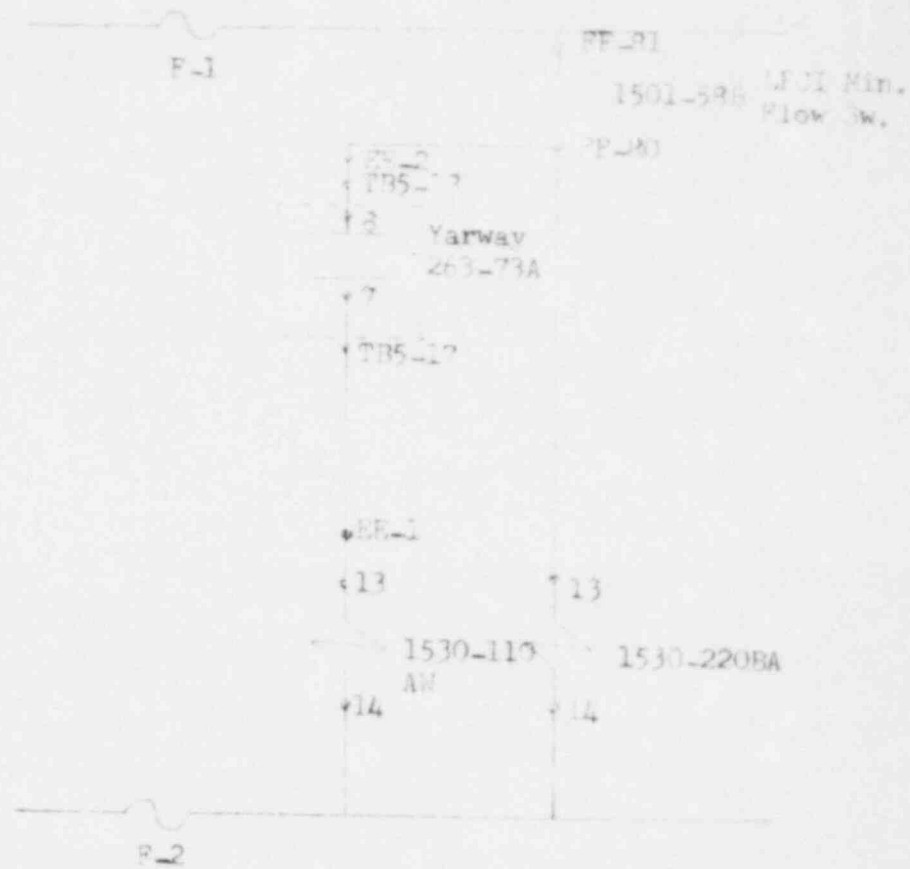
Sincerely,

W. P. Worden
Superintendent

WPW:ls
Enc.



Correct Wiring
as shown on
print 12E3437



Wiring as found. Wire from EE-2
to FF-31 should be from EE-2 to FF-31