



50-237

# Commonwealth Edison Company

72 WEST ADAMS STREET ★ CHICAGO, ILLINOIS

Address Reply to:

POST OFFICE BOX 767 ★ CHICAGO, ILLINOIS 60690

WPW Ltr.#206-73

Dresden Nuclear Power Station  
R. R. #1  
Morris, Illinois 60450  
March 19, 1973

Mr. A. Giambusso  
Deputy Director for Reactor Projects  
Directorate of Licensing  
U. S. Atomic Energy Commission  
Washington, D. C. 20545



SUBJECT: LICENSE DPR-19, DRESDEN NUCLEAR POWER STATION, UNIT #2  
SECTION 6.6.C.(1) OF THE TECHNICAL SPECIFICATIONS.

Dear Mr. Giambusso:

This is to report a condition relating to the operation of the unit in which on February 20, 1973, differential pressure switch DPIS-2-261-34A of the Low Pressure Coolant Injection loop select circuitry was tested after the installation of a locking device, and found to be inoperable.

## PROBLEM AND INVESTIGATION

Differential pressure switch DPIS-2-261-34A, shown on P&ID M-26, is one of four switches that compares the pressure of the recirculating water risers on recirculating water loop "A" and loop "B". In the event of initiation of the Low Pressure Coolant Injection System (LPCI), water is pumped from the suppression chamber into the reactor core by means of the recirculating water risers. The four differential pressure switches on these risers will sense if a break has occurred in either LPCI loop "A" or "B" and will close off the defective loop. The switches are arranged in a one-out-of-two-twice logic array which provides redundancy.

Switch DPIS-2-261-34A failed to operate due to a loose screw on the micro-switch actuating arm. (Figure #1). The function of the screw is to strike the micro-switch plunger when the actuating arm is moved upward by the diaphragm driven cam. The screw apparently vibrated out of position and could no longer make contact with the micro-switch. The records on this particular switch indicate that this screw was found to be loose on one previous occasion. At that time, the screw was tightened.

50-237  
inquiry

1931

March 19, 1973

No record exists of a similar loose screw on any other Barton switch at this site, and in fact the screws are normally very tight and must be moved with a tool. It was concluded that the loose screw in DPIS-2-261-34A was the result of a defective arm assembly which holds the screw.

The safety function of the system was not impaired as a result of this switch failure because redundant switch DPIS-2-261-34C would have performed the selectivity function in the event of a LPCI pipe break.

CORRECTIVE ACTION

The arm assembly and screw for DPIS-2-261-34A were replaced and the switch tested satisfactorily. To further assure the screw will not vibrate out, finger-nail polish will be applied to the threads and the screw will be tested for tightness at the next surveillance.

Sincerely,

*Fred S. Morris*

for W. P. Worden  
Superintendent

WPW:WH:do

cc: WPW Ltr. File

Supersedes:  
L4-288-1-1  
Dated: 6-15-65

PARTS PRICE LIST  
MODEL 288 INDICATING SWITCH

No.: L4-288-1-2  
Page: 3 of 3  
Date: 4-15-67

