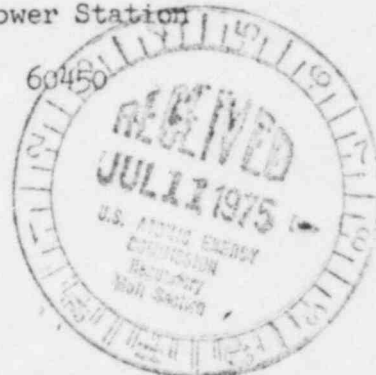




Commonwealth Edison  
One First National Plaza, Chicago, Illinois  
Address Reply to: Post Office Box 767  
Chicago, Illinois 60690

BBS Ltr. #410-75

Dresden Nuclear Power Station  
R. R. #1  
Morris, Illinois 60450  
July 3, 1975



Mr. James G. Keppler, Regional Director  
Directorate of Regulatory Operation-Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

SUBJECT: REPORT OF UNUSUAL EVENT PER SECTION 6.6.C OF THE TECHNICAL SPECIFICATIONS  
FAILURE OF MSIV-1C " $\leq 10\%$  CLOSURE" LIMIT SWITCH

- References:
- 1) Regulatory Guide 1.16 Rev. 1 Appendix A
  - 2) Notification of Region III of U. S. Nuclear Regulatory Commission  
Telephone: P. Johnson, 1400 hours on June 6, 1975
  - 3) Drawing Number 12E2464

Report Number: 50-237/75-36

Report Date: July 3, 1975

Occurrence Date: June 6, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois

#### IDENTIFICATION OF OCCURRENCE

While testing the " $\leq 10\%$  closure" of the main steam isolation valves (MSIV's) on Unit-2, a half-scrum was received on channel "B".

#### CONDITIONS PRIOR TO OCCURRENCE

Unit-2 was at a steady-state power level of 1650 MWt and 525 MWe.

#### DESCRIPTION OF OCCURRENCE

At 0036 hours on June 6, 1975, while MSIV-1A was being tested for the " $\leq 10\%$  closure" surveillance, a half-scrum was received on channel "B" of the reactor protection system. At this point, the surveillance was terminated and MSIV-1A was returned to the open position.

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July 3, 1975

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Component Failure)

Investigation revealed that the " $\leq 10\%$  closure" relay on MSIV-1C was de-energized because the limit switch had remained open electrically after the previous " $\leq 10\%$  closure" test. The limit switch had functioned properly during five " $\leq 10\%$  closure" tests since being installed on May 19, 1975.

ANALYSIS OF OCCURRENCE

The " $\leq 10\%$  closure" limit switch failed in the "fail-safe", or open position, initiating a scram signal in the "B" channel of the reactor protection system. Any scram signal in the "A" channel would have immediately triggered a scram; therefore, plant personnel and the public were not endangered by this occurrence.

CORRECTIVE ACTION

On June 14, 1975, a drywell entry was made to inspect the 1C MSIV " $\leq 10\%$  closure" limit switch. The switch cover was removed and the contacts were found to be binding. The switch was reassembled with less torque applied to the switch contact assembly screws and the switch operated satisfactorily.

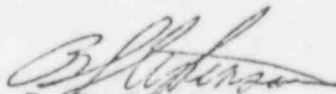
Two problems which have occurred with these switches have been:

- 1) Warping of bakelite switch contact assembly
- 2) Operating arm switch assembly slippage

The electrical maintenance department has ordered new nuclear grade switches of the same type which should eliminate both problems. Replacement will take place during the next outage as time permits.

FAILURE DATA

This type of limit switch has had a history of failures at Dresden as reported in letters U-3-72-7, U-3-72-12, and U-3-73-6. The switch is a snap-lock type SL3-11W, manufactured by Namco.

  
B. B. Stephenson  
Superintendent

BBS:smp

File/NLA