

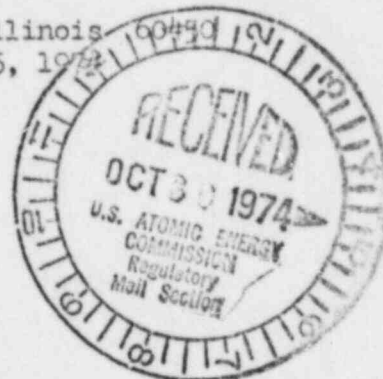


Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

50-237

BBS Ltr. #781-74

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60440
October 25, 1974



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

SUBJECT: REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.A OF THE TECHNICAL SPECIFICATIONS.
MO-2-0202-4B (B RECIRCULATION PUMP SUCTION VALVE) FAILURE TO CLOSE.

References: 1) Regulatory Guide 1.16 Rev.1 Appendix A

2) Notification of Region III of AEC Regulatory Operations
Telephone: Mr. F. Maura, 1520 hours on October 18, 1974
Telegram: Mr. J. Keppler, October 18, 1974

3) Drawing Number: M-26

Report Number: 50-237/1974-52

Report Date: October 25, 1974

Occurrence Date: October 18, 1974

Facility: Dresden Nuclear Power Station, Morris, Illinois

IDENTIFICATION OF OCCURRENCE

MO-2-0202-4B (B Recirculation Pump Suction Valve) failed to close on a signal from the control room.

CONDITIONS PRIOR TO OCCURRENCE

At the time of the incident, Unit 2 was in the RUN mode and was at a thermal power of 2085 megawatts with a corresponding electrical load of 640 megawatts.

DESCRIPTION OF OCCURRENCE

Valve MO-2-0202-4B, the Unit 2 B recirculation pump suction valve, failed to close completely while attempting to isolate the B recirculation pump in preparation for replacing the leaking mechanical seal. At 0255 hours on October

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incident

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18, 1974, the valve was assumed partially open because of a double indication of the position indicating lights. In addition, this determination was verified by timing the interval between the position indicator lights actuation.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Other)

The valve apparently did not close completely because the torque switch opened. The valve's torque switch was inspected during the subsequent reactor outage. No cause for the torque switch opening could be found. Two weeks prior to the occurrence, the valve operated satisfactorily during an outage.

ANALYSIS OF OCCURRENCE

The health and safety of the plant personnel and the public were not jeopardized as a result of the valve failure. If a LOCA occurred and the failure was between the discharge and suction valves of the "B" recirculation pump, the partially opened suction valve would provide a flow path for the reactor water. Since the emergency core cooling systems (ECCS) were designed to maintain the reactor water in the event of a maximum credible accident, these systems would be more than adequate to maintain the reactor water level in this condition.

CORRECTIVE ACTION

At 1400 hours, a special procedure was authorized to bypass the torque-limiting switch and manually close the valve. This completely isolated the leaking pump seal.

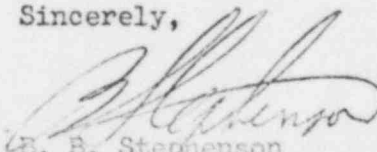
A weekend outage was arranged to replace the pump seal and to examine the suction valve. The torque-limit switch has a relative adjustment from 0-5. The existing valve closing setting of 1.5 was found to be inadequate and therefore, was increased to 2.0.

The manufacturer recommended a setting of 3 with a maximum of 5, which is within the allowable stress for which the valve was designed. The station review function performed an official on site review and approved this change.

FAILURE DATA

To date, no previous malfunctions or failures of this nature have occurred on the recirculation pump suction valves. The valves are Crane 28" list 608 gate valves with design conditions of 1325 psi at 575°F.

Sincerely,


E. B. Stephenson
Superintendent