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POOR ORIGINAL

Nebraska Public Power District

COOPER NUCLEAR STATION
P.O. BOX 98, BROWNVILLE, NEBRASKA 68321
TELEPHONE (402) 825-3811

CNSS800763

January 14, 1981

Mr. K. V. Seyfrit, Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011



Dear Sir:

This report is submitted in accordance with Section 6.7.2.B.2 of the Technical Specifications for Cooper Nuclear Station and discusses a reportable occurrence that was discovered on December 16, 1980. In accordance with the requirements of IE Bulletin 80-17, Mr. Spangler was notified while he was on site December 16, 1980. A licensee event report form is also enclosed.

Report No.: 50-298-80-50
Report Date: January 14, 1981
Occurrence Date: December 16, 1980
Facility: Cooper Nuclear Station
Brownville, Nebraska 68321

Identification of Occurrence:
Conditions which led to operation in a degraded mode permitted by a limiting condition for operation as delineated in Section 3.5.A of the Technical Specifications.

Conditions Prior to Occurrence:
Steady state power operation at approximately 98% reactor power.

Description of Occurrence:
During surveillance testing of RHR motor operated valves, RHR-MO-25B, the "B" loop injection line inboard isolation valve would not open.

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Mr. K. V. Seyfrit
January 14, 1981
Page 2.

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Designation of Apparent Cause of Occurrence:

RHR-MO-25B is an Anchor 900#, 24", gate valve with a Limitorque SMB-3 operator. The apparent cause of the event is related to the closing torque switch setting. The closing torque switch was set at "3.0" which is close to the manufacturer's maximum limit of "3.5". This was the original setpoint of the torque switch. The identical valve in the "A" loop was set during installation at "1.0" but was later changed to "2.0" to meet local leak rate requirements. Apparently the valve during previous operation was close to sticking and certain circumstances during this event prevented it from opening. An evaluation is being performed to determine the possibility of a hydraulic lock occurring in the valve body. If there is evidence of this, an updated report will be submitted.

Analysis of Occurrence:

RHR-MO-25B is the loop "B" RHR injection line inboard isolation valve. This valve is a normally closed valve that receives an open signal for LPCI initiation. In the event of LPCI initiation, this valve would not have opened remotely. The redundant loop was operable and would have operated satisfactorily had it been necessary. In addition, both diesel generators were operable. This occurrence presented no adverse consequences from the standpoint of public health and safety.

Corrective Action:

The valve was opened manually. The close torque switch for the subject valve was set at "2.0" to correspond to the setting of RHR-MO-25A. This will prevent the valve from closing too hard. An evaluation is ongoing to determine the possibility of a hydraulic lock occurring in the valve body. An updated report will be submitted if this evaluation indicates this was a contributing factor.

Unrelated to this event, it was noted during our investigation that the open torque switch was not jumpered out on both RHR-MO-25A & B as indicated on the valve wiring diagram. The intention of jumpering out the open torque switch is to override the open torque switch and thus in the event of an emergency, eliminate the chances of the valve torquing out in the open direction. This discrepancy was corrected. It should be noted that both open torque switches were set at the highest value which effectively accomplished the same result. This statement is justified in that an overload was received on the motor when the RHR-MO-25B stuck in the seat.

Sincerely,

L. C. Lessor
Station Superintendent
Cooper Nuclear Station

LCL:cg

Attach.