

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION HI 799 ROOSEVELT ROAD GLEN ELLYN, I' LINOIS 60137

MAY 31 1979

Docket No. 50-282 Docket No. 50-306

Northern States Power Company A. N: Mr. Leo Wachter Vice President Power Production and System Operation 414 Nicollet Mall Minneapolis, MN 55401

Gentlemen:

The enclosed IE Bulletin No. 79-12 is forwarded to you for information. No written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

James G. Kep

Director

Enclosure: IE Bulletin No. 79-12

cc w/encl: Mr. F. P. Tierney, Jr., Plant Manager Central Files Director, NRR/DPM Director, NRR/DOR PDR Local PDR NSIC TIC John W. Ferman, Ph.D., Nuclear Engineer, MPCA

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U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTIC: AND ENTORCEMENT

May 31, 1979

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SHORT PERIOD SCRAMS AT BWR FACILITIES

Summary:

Reactor scrams, resulting from periods of less than 5 seconds, have occurred recently at three BWR facilities. In each case the scram was caused by high flux detected by the IEM neutron monitors during an approach to critical. These events are similar in most respects to events which were previously described by IE Circular 77-07 (copy enclosed). The recent recurrences of this event indicate an apparent loss of effectiveness of the earlier Circular. Issuance of this Bulletin is considered appropriate to further reduce the number of challenges to the reactor protective system high IRM flux scram.

Description of Circumstances:

The following is a brief account of each event.

- 1. Oyster Creek On December 14, 1978, the reactor experienced a scram as control rods were being withdrawn for approach to critical, following a scram from full power which had occurred about 15 hours earlier. The moderator temperature was 380 degrees F and the reactor pressure was 190 psig. Because of the high xenon concentration the operators had not made an accurate estimate of the critical rod pattern. The operator at the controls was using the SRM count tate, which had changed only slightly, (425 to 450 cps) to guide the approach. Control rod 10-43 (first rod in Group 9) was being withdrawn in "notch override" to notch position 10, when the reactor became critical cn an estimated 2.8 second period. The operator was attempting to reinsert the rod when the scram occurred. Failure of the "emergency rod in" switch to maintain contact, due to a bent switch stop, apparently contributed to the problem.
- 2. Browns Ferry Unit 1 On January 18, 1979, the reactor experienced a scram during the initial approach to critical following refueling. The operator was continuously withdrawing in "notch override" the first control rod in Group 3 (a high worth rod) because the SRM count rate had led him to believe that the reactor was very subcritical. A short reactor

period, estimated at 5 second DUPLICATE DOCUMENT attempting to reinsert contro . Entire document previously entered into system unier: ANO 7906060168 448 335 No. of pages: