UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76012

CENTRAL FILES
PDR:HQ
LPDR
TIC
NSIC

May 31, 1979

Docket No. 50-267

Public Service Company of Colorado
ATTN: Mr. C. K. Millen
Senior Vice President
P. O. Box 840
Denver, Colorado 80201

Gentlemen:

The enclosed IE Bulletin 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,

Karl V. Seyfrit
Director

Enclosures:
1. IE Bulletin No. 79-12
2. IE Circular No. 77-07
3. List of IE Bulletins Issued in Last Twelve Months

cc: D. W. Warembourg, Nuclear Production Manager
Fort St. Vrain Nuclear Station
P. O. Box 368
Platteville, Colorado 80651

L. Brey, Manager, Quality Assurance

(1)

7907200363

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

IE Bulletin No. 79-12
Date: May 31, 1979

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 IRM 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 Oyster Creek - On December 14, 1978, the reactor experienced a scram as control rods were being withdrawn for approach to critical, following a scram from full power which had occurred about 15 hours earlier.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 rate, 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 Control rod 10-43 (first rod in Group 9) was being withdrawn in "notch override" to notch position 10, when the reactor became critical on an estimated 2.8 second period.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 seconds, was experienced. The operator was attempting to reinsert control rods when the scram occurred.