UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

May 31, 1979

Docket No. 50-213

Connecticut Yankee Atomic Power Company
ATTN: Mr. W. G. Counsil
Vice President - Nuclear
Engineering and Operations
P. O. Box 270
Hartford, Connecticut 06101

Gentlemen:

The enclosed 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,

Robert V. Carlson
for Boyce H. Grier
Director

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

cc w/encls:
R. Graves, Plant Superintendent
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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 Oyster Creek - On December 14, 1978, the reactor experienced a scram as control rods were being withdrawn for approach to critical, following a scram from full power which had occurred about 15 hours earlier.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 Control rod 10-43 (first rod in Group 9) was being withdrawn in "notch override" to notch position 10, when the reactor became critical on an estimated 2.8 second period.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.