

October 3, 1975

Mr. Norman C. Moseley, Director, Region II
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
230 Peachtree Street, N.W., Suite 818
Atlanta, Georgia 30303

Dear Mr. Moseley:

ABNORMAL OCCURRENCE 250-75-7
TURKEY POINT UNIT 3

DATE OF OCCURRENCE: SEPTEMBER 24, 1975

MALFUNCTION OF HIGH PRESSURE COMPARATOR IN
PRESSURIZER PRESSURE PROTECTION SYSTEM CHANNEL III

A. CONDITIONS PRIOR TO OCCURRENCE

The reactor was in steady state power operation at 99% rated power. Pressurizer Pressure Protection System Channel III was in the tripped mode and a functional test of that channel was being performed per Operating Procedure 14004.4 entitled "PRESSURIZER PRESSURE AND WATER LEVEL PROTECTION CHANNELS Periodic Test."

B. DESCRIPTION OF OCCURRENCE

The periodic test was initiated at about 2:40 AM on September 24, 1975. At about 3:30 AM, the test signal input did not trip the Channel III high pressurizer pressure comparator PC-3-457A at the required setpoint.

C. DESIGNATION OF APPARENT CAUSE OF OCCURRENCE

Tests of the comparator revealed two failed capacitors in the d.c. power supply. Failure of these capacitors permitted an a.c. signal to be superimposed on the d.c. signal in the comparator. This caused the comparator trip setpoint to be raised above the required value.

D. ANALYSIS OF OCCURRENCE

There are three channels of high pressurizer pressure protection. Pressurizer Pressure Protection System logic requires that two of the three channels be in the trip mode in order to produce a reactor trip signal. During this periodic test, Channels I and II were verified operable. Had an actual high pressurizer pressure occurred, a reactor trip signal would have been generated at the proper setpoint, therefore, the health and safety of the public were not affected by this occurrence.

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E. CORRECTIVE ACTION

Comparator PC-3-457A was replaced with a spare comparator. The PRESSURIZER PRESSURE AND WATER LEVEL PROTECTION CHANNELS Periodic Test was then satisfactorily completed at about 4:25 AM on September 24, 1975.

Correspondence with the vendor has been initiated to further evaluate the malfunction.

F. FAILURE DATA

The faulty PC-3-457A comparator was Model No. 4111082-001, S/N AO 564, manufactured by the Hagan/Computer Systems Division of Westinghouse.

Malfunction of this Model No. comparator occurred on one other occasion. It was described in Abnormal Occurrence Report 251-75-3.

JRB
for A. D. Schmidt
Vice President
Power Resources

MAS/jar

cc: Jack R. Newman, Esquire
Director, Office of Management Information and Program Control (3)
Director, Office of Inspection and Enforcement (40)