

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

8109080299 810826  
PDR ADDCK 05000311  
S PDR

Report Number: 81-71/03X-1  
Report Date: 8-21-81  
Occurrence Date: 7-23-81, 7-24-81 and 7-25-81  
Facility: Salem Generating Station, Unit 2  
Public Service Electric & Gas Company  
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Electrical Distribution System - No. 22 CSD Breaker - Unidentified Trips.  
This report was initiated by Incident Reports 81-271, 81-272, 81-276, 81-281 and 81-287.

CONDITIONS PRIOR TO OCCURRENCE:

7-23-81 Mode 1 - Rx Power 21% - Unit Load 160 MWe  
7-23-81 Mode 1 - Rx Power 25% - Unit Load 200 MWe  
7-24-81 Mode 1 - Rx Power 48% - Unit Load 440 MWe  
7-24-81 Mode 1 - Rx Power 46% - Unit Load 440 MWe  
7-25-81 Mode 2 - Rx Power 0% - Unit Load 0 MWe

DESCRIPTION OF OCCURRENCE:

On five separate occasions on July 23, July 24, and July 25, 1981, No. 22 CSD breaker tripped from an unidentified cause. There were no indicating flags showing on the relays. No. 21 CSD breaker was closed manually. Action statement 3.8.2.1.a was entered at 1614 and 1803 hours, July 23, 1211 and 1805 hours, July 24, and 1624 hours, July 25, 1981.

This occurrence constituted operation in a degraded mode in accordance with technical specification 6.9.1.9.b.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The cause of the breaker trips is still undetermined. It is suspected that the cause of this, and possibly other problems, is in the safeguards equipment cabinet (SEC). The entire chassis of the SEC has been changed several times with no positive results. Numerous tests, investigations, and manufacturer's consultations were conducted. At the date of this report, the possibility of a signal being induced into the circuit by the No. 22 primary water make-up pump, modifying the 15 volt logic voltage, is being investigated.

ANALYSIS OF OCCURRENCE:

Technical specification 3.8.2.1.a requires:

With less than the stated complement of A.C. busses operable or energized, restore the inoperable busses to operable and energized status within 8 hours or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

CORRECTIVE ACTION:

The cause of the breaker trips is still under investigation. The immediate action in each of the five occurrences was to manually close the No. 21 CSD breaker. At 1624 and 1805 hours, July 23, 1222 and 1813 hours, July 24, and 1625 hours, July 25, 1981, respectively, action statement 3.8.2.1.a was terminated.

A supplemental report will be issued when the investigation is completed.

FAILURE DATA:

Not Applicable

Prepared By F. Dickey

*P. J. Dickey*  
Manager - Salem Generating Station

SORC Meeting No. 81-79