

LICENSEE EVENT REPORT (LER)

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|--|--------|-----------|----------------|--|-----------------|--------|-----------------|-------------------|---------------------|-------------------------------|--------|---|------------------|-------------------------------|-------|--|-----------|--------------|---------------------|---|---|---|--|--|
| FACILITY NAME (1) Brunswick Steam Electric Plant, Unit 2 | | | | | | | | | | | | DOCKET NUMBER (2) 0 5 0 0 0 3 2 4 1 OF 0 3 | | | | PAGE (3) 1 OF 0 3 | | | | | | | | |
| TITLE (4) RWCU Group III Isolation During Performance of HPCI MST | | | | | | | | | | | | | | | | | | | | | | | | |
| EVENT DATE (5) | | | LER NUMBER (6) | | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | | | | | | | | | | | | | | |
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES | | | | DOCKET NUMBER(S) | | | | | | | | | | | |
| 0 | 2 | 2 | 1 | 8 | 9 | 8 | 9 | 0 | 0 | 3 | 0 | 0 | 3 | 2 | 2 | 8 | 9 | 0 | 5 | 0 | 0 | 0 | | |
| OPERATING MODE (9) | | 1 | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11) | | | | | | | | | | | | | | | | | | | | |
| POWER LEVEL (10) | | 1 | | 0 | | 0 | | 20.402(b) | | 20.406(c) | | X | | 50.73(a)(2)(iv) | | 73.71(b) | | | | | | | | |
| | | | | | | | | 20.406(a)(1)(i) | | 50.36(a)(1) | | | | 50.73(a)(2)(v) | | 73.71(c) | | | | | | | | |
| | | | | | | | | 20.406(a)(1)(iii) | | 50.36(a)(2) | | | | 50.73(a)(2)(vii) | | OTHER (Specify in Abstract below and in Text, NRC Form 366A) | | | | | | | | |
| | | | | | | | | 20.406(a)(1)(iii) | | 50.73(a)(2)(i) | | | | 50.73(a)(2)(viii)(A) | | | | | | | | | | |
| | | | | | | | | 20.406(a)(1)(iv) | | 50.73(a)(2)(ii) | | | | 50.73(a)(2)(viii)(B) | | | | | | | | | | |
| | | | | | | | | 20.406(a)(1)(v) | | 50.73(a)(2)(iii) | | | | 50.73(a)(2)(ix) | | | | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME Tony Harris, Regulatory Compliance Specialist | | | | | | | | | | | | TELEPHONE NUMBER 9 1 9 4 5 7 2 0 3 8 | | | | | | | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | | |
| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDOS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDOS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDOS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDOS | | | | | |
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| SUPPLEMENTAL REPORT EXPECTED (14) | | | | | | | | | | | | | | EXPECTED SUBMISSION DATE (15) | | MONTH | DAY | YEAR | | | | | | |
| YES (If yes, complete EXPECTED SUBMISSION DATE) | | | | | | | | | | | | | | X NO | | | | | | | | | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

Unit 2 was at 100% power. While performing a maintenance surveillance test on the HPCI steam leak detection system, an I&C technician mistakenly lifted a lead on an adjacent RWCU temperature module, resulting in a RWCU System Group III Isolation, closing the inboard isolation valve. The area monitored by the RWCU Temperature Switch was checked to ensure that no actual high temperature existed, the system was reset and returned to normal operating status.

The root cause of this event was personnel error augmented by a deficiency in the human engineering design of the cabinets where the surveillance testing takes place.

Corrective action for this event is to map the existing modules in the panel, and consider mapping for additional panels in this area.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/86

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|---|--|----------------|-------------------|-----------------|----------|----|-----|
| FACILITY NAME (1) Brunswick Steam Electric Plant, Unit 2 | DOCKET NUMBER (2) 0 5 0 0 0 3 2 4 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
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TEXT (If more space is required, use additional NRC Form 386A's) (17)

Event

RWCU Group III isolation resulting from lifting lead on wrong temperature module while performing HPCI MST.

Initial Conditions

Unit 2 was at 100% power. Residual Heat Removal (RHR) Low Pressure Coolant Injection (LPCI) System (EIIS/BO), Core Spray (CS) System (EIIS/BM) A and B, Reactor Core Isolation Cooling (RCIC) System (EIIS/BN), and Automatic Pressurization System (ADS) (EIIS/**), were operable and in standby readiness. High Pressure Coolant Injection (HPCI) System (EIIS/BJ) was out of service for testing.

Event Description

On February 21, 1989, at 1121, a technician lifted a lead on the temperature module (2-G31-N600E) (EIIS/CE/IMOD) for Reactor Water Cleanup (RWCU) (G31) System (EIIS/CE) while performing a maintenance surveillance test (2MST-HPCI114M) on the HPCI steam leak detection system. This resulted in an RWCU System Group III valve isolation, closing the inboard isolation valve (G31-F001) (EIIS/CE/ISV). The area monitored by the RWCU temperature switch was checked to ensure that no actual high temperature condition existed. The RWCU System was then reset and restored to normal operating status.

Event Investigation

The root cause of this event was personnel error, the technician lifting the wrong lead. Contributing to this event is the fact that the cabinet containing the scam module is a small, confined area with wiring from numerous modules congesting the work area for each module. The cabinets are not designed from a human engineering standpoint to have surveillance type testing performed on the equipment in the back of the cabinets.

Also contributing to this event is that the technician must visually compare the location of the scam module from the identification labeling on the front of the panel and then walk to the back of the panel and identify the corresponding unlabeled module terminals. Due to the complexity and congestion of the wiring in the back of the cabinet, a mistake in selecting the wrong module is possible.

**EIIS System Code Not Available

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Corrective Actions

In order to eliminate the confusion in the back of the cabinet in Panel H12-614, Maintenance will develop a map of the back of the cabinet with the labelling corresponding to that of the front of the cabinet to assist the technician in properly locating the correct module. The map will be maintained on the inside of the cabinet door to the back of the panel.

Maintenance will evaluate the need for further cabinet/panel mapping by 6/1/89.

Event Assessment

There was minimal safety significance to this event as the isolation valves performed as designed, and the high temperature isolation signal was verified to be a false signal.



Carolina Power & Light Company

Brunswick Nuclear Project
P. O. Box 10429
Southport, NC 28461-0429
March 22, 1989

FILE: B09-13510C
SERIAL: BSEP/89-0271

10CFR50.73

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT UNIT 2
DOCKET NO. 50-324
LICENSE NO. DPR-62
LICENSEE EVENT REPORT 2-89-03

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,

J. L. Harness, General Manager
Brunswick Nuclear Project

KAH/pb

Enclosure

cc: Mr. S. D. Ebnetter
Mr. E. G. Tourigny
BSEP NRC Resident Office

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