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REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9002220126 DOC.DATE: 90/02/15 NOTARIZED: NO DOCKET #
 FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
 AUTH.NAME AUTHOR AFFILIATION
 BAUCOM,C.T. Carolina Power & Light Co.
 MORGAN,R.E. Carolina Power & Light Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-002-00:on 900117,reactor trip during performance of
 nuclear instrumentation surveillance test.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 1
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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Carolina Power & Light Company

ROBINSON NUCLEAR PROJECT DEPARTMENT
POST OFFICE BOX 790
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FEB. 15 1990

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United States Nuclear Regulatory Commission
Attn: Document Control Desk
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H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
LICENSEE EVENT REPORT 90-002

Gentlemen:

The enclosed Licensee Event Report (LER) is submitted in accordance with 10 CFR 50.73 and NUREG-1022 including Supplements No. 1 and 2.

Very truly yours,



R. E. Morgan
General Manager
H. B. Robinson S. E. Plant

CTB:lko

Enclosure

cc: Mr. S. D. Ebnetter
Mr. L. W. Garner
INPO

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LICENSEE EVENT REPORT (LER)

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|---|--------|--|----------------|---------------------|-----------------|------------------|-----------------|-----------|----------------|--|--|-------------------------------|-------------------|--|-----|------|
| FACILITY NAME (1) H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 | | | | | | | | | | DOCKET NUMBER (2) 0 5 0 0 0 2 6 1 | | | | PAGE (3) 1 OF 0 3 | | |
| TITLE (4) REACTOR TRIP DURING PERFORMANCE OF NUCLEAR INSTRUMENTATION SURVEILLANCE TEST | | | | | | | | | | | | | | | | |
| 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 1 | 1 7 | 9 0 | 9 0 | 0 0 2 | 0 0 | 0 2 | 1 5 | 9 0 | | | | | 0 5 0 0 0 | | | |
| OPERATING MODE (9) | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) | | | | | | | | | | | | | | |
| N | | 20.402(b) | | | | 20.405(c) | | | | X 50.73(a)(2)(iv) | | | | 73.71(b) | | |
| POWER LEVEL (10) | | 20.405(a)(1)(i) | | | | 50.38(c)(1) | | | | 50.73(a)(2)(v) | | | | 73.71(c) | | |
| 1 0 0 | | 20.405(a)(1)(ii) | | | | 50.38(c)(2) | | | | 50.73(a)(2)(vii) | | | | OTHER (Specify in Abstract below and in Text, NRC Form 366A) | | |
| | | 20.405(a)(1)(iii) | | | | 50.73(a)(2)(i) | | | | 50.73(a)(2)(viii)(A) | | | | | | |
| | | 20.405(a)(1)(iv) | | | | 50.73(a)(2)(ii) | | | | 50.73(a)(2)(viii)(B) | | | | | | |
| | | 20.405(a)(1)(v) | | | | 50.73(a)(2)(iii) | | | | 50.73(a)(2)(x) | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | |
| NAME C. T. Baucom, Senior Specialist | | | | | | | | | | TELEPHONE NUMBER | | | | | | |
| | | | | | | | | | | AREA CODE 8 0 3 3 8 3 - 1 2 5 3 | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | |
| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPRDS | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 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)

On January 17, 1990, at 2026 hours, a Reactor Protection System (RPS) actuation occurred with the unit at 100% power. The reactor trip occurred during performance of a routine operations surveillance test on the power range nuclear instrumentation channels. The operator performing this test had inadvertently placed the bistables for two independent channels of the overtemperature differential temperature (OTΔT) reactor trip feature into the tripped position, completing the required logic to initiate the RPS actuation. The primary cause of this event was identified as personnel error, with a possible contributing factor being the format of the test procedure. The operator has been counseled regarding procedure adherence and attention to detail. In addition, the Manager - Operations has communicated to operations personnel the importance of promptly identifying and correcting situations which might later result in a personnel error or injury. Also, a review will be performed to establish and document the aspects of human factors, procedure format, and work practices which may have contributed to the occurrence of this event. The NRC was notified of this event pursuant to 10CFR50.72(b)(2)(ii) at 2105 hours via the Emergency Notification System. This Licensee Event Report is submitted pursuant to 10CFR50.73(a)(2)(iv).

NRC Form 364A
(9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/88

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (8) | | | PAGE (3) | | |
|----------------------------------|-------------------|----------------|-------------------|-----------------|----------|----|-----|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| H. B. ROBINSON PLANT, UNIT NO. 2 | 0 5 0 0 0 2 6 1 | 9 0 | — 0 0 2 | — 0 0 | 0 2 | OF | 0 3 |

TEXT (If more space is required, use additional NRC Form 364A's) (17)

I. Description of Event

On January 17, 1990, the unit was operating at steady-state conditions with reactor power at 100% and net electrical generation at 746 MW.¹ Routine operations and shift activities were in progress. At the time of the event, operations personnel were performing a regularly scheduled Operations Surveillance Test, OST-007, "Nuclear Instrumentation Comparator Channel," which is performed biweekly when the reactor is at power. This test required that the overtemperature differential temperature (OTΔT) and overpower differential temperature (OPΔT) reactor trip bistables be tripped for the power range nuclear instrumentation (NI) channel being tested. While performing steps for testing the first channel, NI-41, the operator tripped the associated OTΔT and OPΔT bistables for Protection Channel I. The operator then inadvertently tripped the OTΔT and OPΔT bistables associated with N-42 (Protection Channel II). This fulfilled the required logic to initiate a Reactor Protection System (RPS) actuation. An OTΔT reactor trip was received at 2026 hours. Plant conditions were subsequently stabilized in accordance with Emergency Operating Procedures with no problems or discrepancies noted. At 2105 hours, notification was made to the NRC via the Emergency Notification System. This notification was made pursuant to 10CFR50.72(b)(2)(ii) as an event or condition which resulted in automatic actuation of the Reactor Protection System.

II. Cause of Event

The primary cause of this event was a personnel error.² The operator performing the surveillance test inadvertently tripped the bistables for Protection Channel II. Since the associated bistables for Protection Channel I were already in the tripped position, the two-out-of-three logic for RPS actuation was fulfilled.

A possible contributing factor is the format of the procedure used for performance of this surveillance. OST-007 provides four columns for step signoffs, one for each of the four channels of power range nuclear instrumentation. As sequential steps are performed within the procedure, they may or may not apply to the channel being tested. The operator must recognize whether the step to be performed is applicable to the channel being tested.

¹H. B. Robinson Steam Electric Plant Unit No. 2 is a Westinghouse Pressurized Water Reactor power plant in commercial operation since March 1971.

²Cause Code: A

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) | |
|----------------------------------|---------------------|----------------|-------------------|-----------------|----------|--------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | |
| H. B. ROBINSON PLANT, UNIT NO. 2 | 0 5 0 0 0 2 6 1 9 0 | — | 0 0 2 | — 0 0 | 0 3 | OF 0 3 |

TEXT (If more space is required, use additional NRC Form 365A's) (17)

In this event, the step for tripping of Protection Channel I bistables (applicable to N-41) is located at the bottom of a page, while the step which tripped the Protection Channel II bistables (applicable to N-42) is located at the top of the next page. In summary, the format of OST-007 may have contributed to the occurrence of this event. However, an investigation is currently in progress to establish and document the causal factors which resulted in the inadvertent RPS actuation.

III. Analysis of Event

The Reactor Protection System properly responded to the inadvertent positioning of the bistables. All systems performed as designed with no discrepancies or anomalies observed. Operations personnel responded to the transient in accordance with the Emergency Operating Procedures and established stable plant conditions with the unit at hot shutdown.

This Licensee Event Report is submitted pursuant to 10CFR50.73(a)(2)(iv) as an event or condition that resulted in manual or automatic actuation of the Reactor Protection System.

IV. Corrective Actions

The responsible individual has been counseled with regard to procedure adherence and attention to detail. Also, the Manager - Operations has communicated to operations personnel the importance of promptly identifying and correcting situations which might later result in a personnel error or injury.

Also, as stated above, a review will be completed which will establish and document the aspects of human factors, procedure format, and work practices which may have contributed to the occurrence of this event. This review will be completed by April 20, 1990.

V. Additional Information

A. Failed Component Identification

None

B. Previous Similar Events

LER 89-005 described a reactor trip which resulted from the inadvertent closure of a main steam isolation valve.

LER 87-025 described a reactor trip which resulted from a personnel error during performance of a routine Maintenance Surveillance Test on the reactor trip breakers.