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FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
AUTH.NAME AUTHOR AFFILIATION
CROOK,D. Carolina Power & Light Co.
CHAMBERS,R.H. Carolina Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 92-012-00:on 920619,during surveillance testing reactor trip occurred.Root cause has not yet been identified. Corrective actions will be identified as part of ACR process & will be provided in supplementary rept .W/920717 ltr.

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JUL 17 1992

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RNPD/92-1913
(10CFR50.73)

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 NO. 92-012-00

Gentlemen:

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

Very truly yours,

Roy H. Chambers

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

RDC:sgk

Enclosure

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

NRC FORM 366 (6-89)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

ESTIMATED BURDEN PER RESPONSE TO COMPLY WTH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2	0 5 0 0 0 2 6 1	1 OF 0 3

TITLE (4)

REACTOR TRIP AT HOT SHUTDOWN DURING SURVEILLANCE TESTING

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 6	1 9	9 2	9 2	— 0 1 2	— 0 0	0 7	1 6	9 2		0 5 0 0 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)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0		20.405(a)(1)(ii)	50.36(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	TELEPHONE NUMBER
	AREA CODE
DAVID CROOK - SENIOR SPECIALIST - REGULATORY COMPLIANCE	8 0 3 — 3 8 3 - 1 1 7 9

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		1 1	3 0	9 2

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

On June 19, 1992, H. B. Robinson Unit No. 2 was in hot shutdown and preparing for startup from a scheduled refueling outage. During surveillance testing which involved collection of cross calibration data for the Reactor Coolant System narrow range Resistance Temperature Detectors (RTD), a reactor trip occurred. At the time of the event, a Reactor Protection System bistable in loop 1 was in the tripped condition due to a RTD time response failure, unrelated to the on-going surveillance testing. The trip occurred when a temperature module voltage spiked high, causing a high delta temperature signal on loop 3. The plant was placed in stable condition, and an event investigation was initiated.

The root cause of this event has not been determined. The apparent cause is attributed a combination of the response of the equipment being tested and the configuration of the system during the testing process. Corrective actions will be identified when the investigation is completed. There were no adverse safety consequences because the plant was shutdown at the time of the event.

This report is submitted pursuant to 10 CFR 50.73(a)(2)(iv).

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

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

I. DESCRIPTION OF EVENT

On June 19, 1992, H. B. Robinson Unit No. 2[1] was in hot shutdown condition at 542 degrees F and preparing for startup from a scheduled refueling outage. At 2048 hours, with surveillance test EST-052, "Operational Alignment of Process Temperature Instrumentation" in progress, a reactor trip occurred. The Emergency Operating Procedures were entered, and the plant was placed in a stable condition. At the time of the event, the reactor protection Over Temperature Delta Temperature (OTΔT) bistable (TC-412C) associated with Reactor Coolant System (RCS) Loop 1 was in the tripped condition due to a Resistance Temperature Detector (RTD) time response failure, unrelated to the on-going surveillance testing.

The portion of the test being performed involved the collection of cross-calibration data for the RCS Narrow Range RTD's. The data is acquired using an RTD Test Panel external to the Reactor Protection and Control Analog Instrumentation cabinets (Hagan Racks) to switch between individual RTD's in order to measure their outputs at different temperature plateaus during heatup operations. On the test panel, individual switches are manually actuated to energize relays inside the test panel that divert the RTD input from the Hagan Rack terminal strip to the test meter used to measure the RTD resistance. These switches are actuated one at a time and each RTD output is restored to its Hagan Rack input before the next RTD is switched out of service to be measured. Four sets of data are taken in an alternate fashion (two sets in the order of loop 1, then loop two, and lastly loop three, and two sets in reverse order) at each temperature plateau.

Data had been successfully acquired from loops 1 and 2 without incident. However, during data collection for loop 3, the temperature module voltage for TE-432B2 spiked high, due to the rapid removal of the input resistance when the test switch was actuated, causing the OTΔT trip setpoint to be exceeded. This, when combined with the pre-existing OTΔT bistable tripped for loop one, resulted in a reactor trip via the satisfaction of the required two out of three logic.

The NRC was notified of this event at 1221 hours via the ENS pursuant to 10 CFR 50.72(b)(2)(ii).

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

II. CAUSE OF EVENT

An Adverse Condition Report[2] was initiated so that this event could be investigated and the root cause be determined. Because the investigation process has not yet been completed, the root cause of this event has not yet been identified. The apparent cause is a combination of the response of the equipment being tested and the configuration of the system during the testing process.

III. ANALYSIS OF EVENT

There were no adverse safety consequences as a result of this event. The portion of the test being conducted at the time is not performed during power operations. The plant was in hot shutdown condition at the time of the event, safeguards systems performed as designed, and a significant transient did not occur. Plant operations personnel maintained plant safety in accordance with established procedures.

This report is submitted pursuant to 10 CFR 50.73(a)(2)(iv).

IV. CORRECTIVE ACTIONS

Corrective actions will be identified as part of the ACR process and will be provided in a supplement to this report.

V. ADDITIONAL INFORMATION

A. Previous Similar Events

None

B. Component Failures

None

[2] Adverse Condition Report 92-222.