NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Catawba Nuclear Station, Unit 2	0 5 0 0 0 4 1 4	1 OF 0 3

TITLE (4)
Feedwater Isolation Due To A Training Deficiency

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	0 3	8 6	8 6	— 0 2 2	— 0 0	0 7	0 3	8 6	N/A	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	X 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)	50.72(b)(2)(ii)
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Roger W. Ouellette, Associate Engineer, Licensing	AREA CODE 7 0 4 — 3 7 3 - 7 5 3 0

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 June 3, 1986, at approximately 0125 hours, a Feedwater (CF) Isolation occurred during testing of the Train A Solid State Protection System. Personnel had racked the Reactor Trip Breakers to the test position, and were to close the breakers to support the test. One of the Reactor Trip Breakers immediately reopened, initiating a CF Isolation. The open breaker was again closed by the Operator with no abnormal occurrence. Personnel subsequently reset the CF Isolation signal, and returned the feedwater valves to the previous alignment. The unit was in Mode 5, Cold Shutdown, at the time of this incident.

This incident is assigned Cause Code X, Other. The Operator did not receive adequate training concerning the manipulation of the Reactor Trip Breaker control switches, causing an inadvertent CF Isolation to be initiated.

This incident is reportable pursuant to 10CFR 50.73, Section (b)(2)(ii) and 10CFR 50.73, Section (a)(2)(iv).

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

BACKGROUND

Procedure IP/0/A/3200/02A, Solid State Protection System (SSPS) (EIIS:JC) Train A Periodic Testing procedure is used monthly to verify the operability of the logic in the SSPS. The test may be performed without disturbing the operation of the plant. Two redundant trains provide protection functions for equipment in the plant.

A TRIP-CLOSE pistol-type switch on the control board is utilized to close the breakers. In the CLOSE position, there are two sets of contacts which must close. One contact is interlocked with undervoltage relaying and the other is interlocked with the breaker's closing springs controls. The switch is spring-returned to the center (neutral) position after the breaker is aligned.

If a Reactor Trip Breaker opens when Reactor Coolant System (EIIS:AB) average temperature (Tave) is below 564 degrees F, Feedwater (CF) (EIIS:SJ) Isolation will occur. The Operator may prevent CF Isolation while opening a Reactor Trip breaker by simultaneously depressing both CF ISOL TRN A and B Reset pushbuttons and opening the breakers.

DESCRIPTION OF INCIDENT

On June 3, 1986, test personnel were performing IP/0/A/3200/02A, Solid State Protection System (SSPS) Train A Periodic Testing. In order to support the testing, the Reactor Trip Breakers, RTA and RTB, were racked into the test position. At approximately 0124 hours, RTB and RTA were closed from the Control Room. Immediately RTB reopened unexpectedly giving a Reactor Trip indication concurrent with a low Tave. This caused a CF Isolation to occur. At approximately 0124:03 hours, RTB was successfully closed. CF Isolation was reset and the valves were realigned to the previous position.

CONCLUSIONS

This incident is assigned Cause Code X, Other. The Operator closed RTB and released the spring loaded control switch. Operators have not been explicitly trained in the proper manipulation of the breaker control switches. This instruction has been added into the training program.

A contributing cause to this event is the malfunction of the RTB switch. Personnel investigated the switch, and found that turning the handle partially gave a closed target indication on the switch but did not close the breaker in. In addition, it was found that if the handle was turned to the full right position, and then released, allowing the spring to pull the handle back, the breaker went back to the open position. A new control switch for breaker RTB has been ordered. The switch is a General Electric SBM switch. There has been one previous incident involving failure to properly operate the RTB control switch (see LER 414/86-11).

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

There have been no malfunctions of this type reported to the NPRDS Network. This incident is not reportable to the NPRDS network since Unit 2 is not in Commercial Operation.

CORRECTIVE ACTION

(1) The CF Isolation signal was reset and affected CF valves were returned to their previous alignment.

(2) An Operator Update was issued addressing the proper method of manipulating the breaker control switches.

(3) The Operator Update information has been incorporated into the Employee Training and Qualification System.

(4) A Work Request was written to replace RTB control switch. The replacement is dependent upon receipt of the new switch.

SAFETY ANALYSIS

Steam Generator levels remained constant at approximately 50% narrow range level during this incident, as they were isolated from the Feedwater Systems. The Auxiliary Feedwater System (EIIS:BA) was not required to actuate following the CF Isolation signal. An adequate heat sink for the Reactor Coolant System was available at all times.

The health and safety of the public were not affected by this incident.

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July 3, 1986

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Catawba Nuclear Station, Unit 2
Docket No. 50-414

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 414/86-22 concerning a Feedwater isolation due to a training deficiency. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

RWO/11/jgm

Attachment

xc: Dr. J. Nelson Grace, Regional Administrator
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Atlanta, Georgia 30323

American Nuclear Insurers
c/o Dottie Sherman, ANI Library
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INPO Records Center
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NRC Resident Inspector
Catawba Nuclear Station

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