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RLB-92-037

February 4, 1992

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

Reference: Quad Cities Nuclear Power Station
Docket Number 50-265, DPR-30, Unit Two

Enclosed is Licensee Event Report (LER) 92-004, Revision 00, for Quad Cities Nuclear Power Station.

This report is submitted in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(iv). The licensee shall report any event or condition that resulted in manual or automatic actuation of any Engineered safety feature.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD CITIES NUCLEAR POWER STATION

R. L. Bax
Station Manager

RLB/TB/plm

Enclosure

cc: J. Schrage
T. Taylor
INPO Records Center
NRC Region III

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STMQR 281

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1)	Docket Number (2)	Page (3)
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Title (4)

Inadvertent Closure of U2 Rx Bldg Isolation Damper

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 5 0 0 0
0 1	1 6	9 1	9 2	0 0 4	0 0	0 2	0 5	9 2		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)			
3		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 0	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)	Other (Specify in Abstract below and in Text)
		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
Rachel A. Luebbe Ext. 2119	3 0 9 6 5 4 - 2 2 4 1

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)

ABSTRACT:

On January 16, 1992 at 0040 hours, Unit Two was in the Shutdown mode for a refueling outage. Tech Staff was performing QTS 105-9, "Pneumatic Accumulator System Pressure Decay and Fail Safe Test," under Temporary Procedure #7371. Damper [DMP] 2-5742A was being tested. For the pressure decay portion of the test, the test director and Instrument Mechanic (IM) agreed to place the jumper across terminals 160 and 161 in panel 2252-24x which would be equivalent to placing a jumper across the contact at the pressure switch. A direct ground resulted, which blew fuse [FU] F-3, causing the Reactor Building Vent [VA] Isolation Dampers to go closed.

The apparent cause of the event is personnel error. Tech Staff and IM personnel incorrectly read the wiring diagram. The proper terminal points should have been 150 and 151.

All dampers were tested successfully on January 18, 1992 at 1040 hours. Further corrective actions will include revising QTS 105-9 and other Local Leak Rate Test procedures as applicable.

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2511 MWt rated core thermal power.

EVENT IDENTIFICATION: Inadvertent closure of U2 Rx Bldg Isolation Damper.

A. CONDITIONS PRIOR TO EVENT:

Unit: Two Event Date: January 16, 1992 Event Time: 0040
Reactor Mode: 3 Mode Name: STARTUP Power Level: 00%

This report was initiated by Deviation Report D-4-02-92-009.

STARTUP (3) - In this position, the reactor protection scram trips, Initiated by condenser low vacuum and main steamline isolation valve closure are bypassed and the reactor protection system is energized, with IRM and APRM neutron monitoring system trips and control rod withdrawal interlocks in service.

B. DESCRIPTION OF EVENT:

On January 15, 1992 at 2200 hours, Unit Two was in the Shutdown mode for a refueling outage. Tech Staff was performing QTS 105-9, "Pneumatic Accumulator System Pressure Decay and Fail Safe Test," under Temporary Procedure #7371. The first test involved the 2-5741A damper [DMP] which had failed the slow bleed fail safe portion of the test on January 14, 1992. The fail safe check valves had been replaced. For the pressure decay portion of the test the procedure specified that a jumper should be placed across the contacts at the pressure switch [PS]. Due to the location of the pressure switch and its tamperproof construction, the jumper was placed across terminals 145 and 146 in panel [PL] 2252-24x. During discussions between the Instrument Maintenance (IM) Department and the test director it was decided that the alternate location was equivalent to what was specified in the procedure. This conclusion was supported by prejob discussions with previous test directors who had performed this test in a similar manner. The test on the 2-5741A damper was successfully concluded. A shift turnover occurred and a new instrument mechanic was assigned. The next damper to be tested was the 2-5742B. This test was stopped after the slow bleed portion of the test failed at 2330 hours on January 15, 1992. An unsuccessful attempt was made to contact the shift engineer. Damper 2-5742A was tested next. The slow and fast bleed off fail safe tests both passed. The test director and IM reviewed electrical print 4E-2814C to determine the terminals that would be equivalent to placing a jumper across the contact at the pressure switch. The drawing was incorrectly read and the jumper was placed on terminals 160 and 161 at 0040 hours on January 16, 1992. A direct ground resulted, with an accompanying spark. Fuse F-3 was found blown, which had deenergized the solenoid [SOL] valves to the Reactor Building Vent Isolation Dampers. The dampers 2-5742A and 2-5742B failed closed, while dampers 2-5741A and 2-5741B were already full closed. Fuse F-3 was replaced immediately. The Emergency Notification System (ENS) phone call was made on January 16, 1992 at 0235 hours in accordance with 10CFR.72(B)(2)(ii).

The fail safe [illegible] valves were replaced on the three remaining dampers, 2-5741B, 2-5742A and 2-5742B. On January 18, 1992 at 1040 hours, the fail safe test was successfully completed on the three remaining dampers. The dampers were reset and the vent fans restarted.

C. APPARENT CAUSE OF EVENT:

The apparent cause of the event is personnel error. Tech Staff and IM personnel [illegible] wiring diagram 4E-2814C for pressure switch to the 2-5742A damper. The [illegible] were 160 and 161, the proper terminal points for the pressure switch were 150 and 151. Contributing factors to the event was an illegible wiring diagram and inadequate temporary procedure that should have identified specific terminals.

D. SAFETY ANALYSIS OF EVENT:

The safety significance of the event was minimal. There are two supply and two exhaust dampers for the Reactor Building Ventilation System. All the isolation dampers moved to their failsafe position. There was no breach of secondary containment.

This event is being reported in accordance with 10CFR50.73(A)(2)(iv). The licensee must report any event or conditions that resulted in a manual or automatic actuation of an Engineered Safety Feature (ESF).

E. CORRECTIVE ACTIONS:

The immediate corrective actions were to make sure all the Rx Bldg Vent Isolation Dampers were closed and to stop testing immediately. The three remaining dampers, 2-5741B, 2-5742A and 2-5742B, were tested successfully on January 18, 1992 at 1040 hours. Individuals involved in the event were counseled. The Tech Staff personnel involved in the test was suspended from all Local Leak Rate Test (LLRT) until the investigation was completed. Tech Staff Group Leader overview of LLRT's was implemented to ensure procedural adherence and prevent personnel errors.

Further corrective actions are: 1) to train Tech Staff test personnel so that they fully understand the requirements under QAP 300-12 on installing temporary jumpers for approved station procedures NTS #265 200 92 00901). 2) Revise QTS 105-9 to include terminals which are practical for jumper placement (NTS #265 200 92 00902). 3) Review other Local Leak Rate Test (LLRT) procedures for similar problems with jumper or block placement (NTS #265 200 92 00903). 4) The Plant Walkdown Group is in the process of revising all drawings in the plant. When this program is complete all drawings in the plant will be upgraded and as-built.

F. PREVIOUS EVENTS:

There have been no events involving improper jumper installation caused by illegible prints. The following previous events involve improper installation or removal of jumpers, however, only one of these events resulted in an LER.

D4-2-88-35 RWCU isolation (review of jumper removal inadequate)
LER 2-88-018

D4-1-88-50 MCR isolation (improper jumper installation-unfamiliar terminal layout)

D4-1-89-106 1/2 SCRAM-blown fuse (jumper touched ground)

G. COMPONENT FAILURE DATA:

There is no component failure data to report.