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RLB-92-103

April 30, 1992

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

Reference: Quad Cities Nuclear Power Station
Docket Number 50-254, DPR-29, Unit One

Enclosed is Licensee Event Report (LER) 92-009, 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)(i)(B): The licensee shall report any operation or condition prohibited by the plant's Technical Specification.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD CITIES NUCLEAR POWER STATION

R L Bax

R. L. Bax
Station Manager

RLB/TB/plm

Enclosure

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

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FEED

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Quad Cities Unit One
 Docket Number (2) 0 | 5 | 0 | 0 | 0 | 2 | 5 | 4
 Page (3) 1 | of | 0 | 4
 Title (4) Missed Technical Specification Functional Test Requirements Due To An Inadequate Procedure

Event Date (5)			LFR 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 4	0 1	9 2	9 2	0 0 9	0 0	0 4	2 9	9 2	Quad Cities Unit Two	0 5 0 0 0 2 6 5 0 5 0 0 0 1 1

OPERATING MODE (9) 4
 POWER LEVEL (10) 1 | 0 | 0
 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)
 Name Mark L. Bridges, Tech Staff Engineer, Ext. 2944
 TELEPHONE NUMBER AREA CODE 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) _____
 Yes (If yes, complete EXPECTED SUBMISSION DATE) NO

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

ABSTRACT:

On April 1, 1992, at 1355 hours, Unit One (U1) was in the RUN Mode operating at 100 percent of rated core thermal power. During the performance of QIS 71-2, on the U1 service water radiation monitor (SWRM), an auditor discovered that the Technical Specification (TS) functional test requirements of TS Table 4.2-3 were not being fully met by this procedure. The radwaste radiation monitor, Steam Jet Air Ejector (SJAE) radiation monitors, and the Main Chimney High Range Noble Gas (HRNG) monitor functional tests also did not meet the functional requirements of TS Table 4.2-3 and Table 4.2-4. The Shift Engineer (SE) was notified and he declared the U2 SWRM, the radwaste effluent radiation monitor, the U1 and U2 SJAE monitors, and the HRNG monitor inoperable. Temporary procedure changes were implemented to comply with the testing requirements of TS Tables 4.2-3 and 4.2-4. The Unit Two (U2) SWRM, radwaste radiation monitor, HRNG monitor, and SJAE radiation monitors were then functionally tested and declared operable. Permanent procedure changes were made to correct the inadequate procedures. This report is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(i)(b).

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TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]																									

PLANT AND SYSTEM IDENTIFICATION:

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

EVENT IDENTIFICATION: Missed Technical Specification Functional Test Requirements Due To An Inadequate Procedure.

A. CONDITIONS PRIOR TO EVENT:

Unit: One Event Date: April 1, 1992 Event Time: 1355
Reactor Mode: 4 Mode Name: RUN Power Level: 100%

This report was initiated by Deviation Report D-4-1-92-027.

RUN Mode (4) - In this position the reactor system pressure is at or above 825 psig, and the reactor protection system is energized, with APRM protection and RBM interlocks in service (excluding the 15% high flux scram).

B. DESCRIPTION OF EVENT:

On April 1, 1992, at 1355 hours, Unit One (U1) was in the RUN Mode operating at 100 percent of rated thermal power. The U1 service water radiation monitor (SWRM) [IL] was inoperable due to intermittent signal spiking. During the performance of QIS 71-2, "Service Water Radiation Monitor Functional Test" by the Instrument Maintenance (IM) Department on the U1 SWRM, a Nuclear Quality Program (NQP) auditor discovered that the Technical Specification (TS) functional test requirements as delineated in TS Table 4.2-3 were not being fully met by this procedure. The procedure did not verify the requirement for the monitor to provide a control room indication of a downscale failure. The radwaste radiation monitor's [IL] functional test, QIS 33-2, "Radwaste Effluent Functional Test", also did not demonstrate proper indication of a downscale failure. The Shift Engineer (SE) was notified and he declared the Unit Two (U2) SWRM and the radwaste effluent radiation monitor inoperable. Outage reports QOS 1700-04, "Service Water Effluent Gross Activity Monitor Inoperable Outage Report", and QOS 1700-06, "Liquid Radwaste Effluent Gross Activity Monitor Inoperable Outage Report" were then initiated. The SE then informed the Chemistry technician foreman to begin taking once per 12 hour grab samples of the U2 service water return header in accordance with TS Table 3.2-5.

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

The Chemistry Department, IM Department and Technical Staff conducted a review of all testing requirements associated with Table 4.2-3 and 4.2-4. On April 2, 1992, at 1132 hours, the IM Department informed the SE that the Steam Jet Air Ejector (SJAE) radiation monitors [IL] and the Main Chimney High Range Noble Gas (HRNG) monitor [IL] also did not meet the functional testing requirements of TS Table 4.2-4. The SE then declared the U1 and U2 SJAE radiation monitors and the HRNG monitor inoperable. This placed U1 in a 72 hour limiting condition of operation (LCO) for loss of SJAE radiation monitors. U2 was in the REFUEL mode which does not require the SJAE radiation monitors to be operable. Therefore, no LCO was entered for U2.

Outage reports QOS 1700-2, "SJAE Radiation Monitors Inoperable Outage Report", and QOS 1700-08, "Main Chimney High Range Noble Gas Monitor Inoperable Outage Report", were initiated by the SE. At 2211 hours, an IM technician completed QIS 36-1, "Air Ejector Off Gas Monitor Electronic Calibration and Functional Test", and QIS 36-3, "Air Ejector Off-Gas LRM Chassis Calibration and Functional Test", under temporary procedures #7705 and #7706 respectively on the U1 SJAE radiation monitors. The temporary procedures added steps to verify the monitors capability to provide control room indication and annunciation when the monitor is not in the OPERATE mode. At 2215 hours, the SE declared the U1 SJAE radiation monitors operable and closed outage report QOS 1700-02. This allowed U1 to exit the 72 hour LCO for the SJAE radiation monitors. At 2240 hours, an IM technician completed QIS 36-1 and QIS 36-3 under temporary procedures #7705 and #7706 respectively on the U2 SJAE radiation monitors. At 2300 hours, the SE declared the U2 SJAE radiation monitors operable and closed outage report QOS 1700-02.

On April 3, 1992, a Chemist completed QCP 400-18, "SPING 3/4 Calibration", under temporary procedure #7707 on the HRNG monitor. This temporary procedure also added steps to verify the monitors capability to provide control room indication and annunciation of downscale failures. The SE then declared the HRNG monitor operable and closed outage report QOS 1700-08.

On April 15, 1992, at 1102 hours, an IM technician completed QIS 71-2 under temporary procedure #7713 on the U2 SWRM, and QIS 33-2 under temporary procedure #7712 on the radwaste effluent radiation monitor.

This temporary procedure verified the monitors capability to provide control room indication and annunciation of downscale failures. The SE then closed outage reports QOS 1700-04 (U2 SWRM) and QOS 1700-06 (radwaste radiation monitor) and declared the monitors operable. Also, on April 15, 1992, temporary procedure #7707 was incorporated as a permanent procedure which met all TS criteria for functional tests.

On April 16, 1992, permanent procedure changes were made to QIS 33-2, QIS 36-1, QIS 36-3, QIS 71-2 to satisfy all TS functional testing requirements for the liquid effluent and SJAE radiation monitors.

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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR50.73(a)(2)(1)(b), which requires the licensee to report a violation or condition prohibited by the plant's Technical Specifications.

The root cause of this event was procedural inadequacy. The functional tests for each of these radiation monitors failed to test the monitors to the requirements of TS Table 4.2-3 and 4.2-4. The monitoring systems appear to have never been tested since original installation to all of the TS requirements.

D. SAFETY ANALYSIS OF EVENT:

The safety consequences of this event were minimal. The existing functional testing procedures verified the monitoring systems high alarm capability was operational. In the event of a transient or accident, these monitoring systems would have performed as needed. Also, in the case of the SWRMs, the Chemistry Department routinely takes grab samples from both service water return headers once every 12 hours even when the monitor is operational. This satisfies the requirements of TS Table 3.2-5.

E. CORRECTIVE ACTIONS:

The immediate corrective action was for the SE to declare the monitoring systems inoperable and initiate the appropriate outage reports. Temporary procedure changes were implemented to comply with the testing requirements of TS Tables 4.2-3 and 4.2-4. The U2 SWRM, radwaste radiation monitor, HRNG monitor, and SJAE radiation monitors were then functionally tested and declared operable. Permanent procedure changes were made to correct the inadequate procedures.

F. PREVIOUS EVENTS:

Events resulting from a missed TS surveillance are not reportable to the Nuclear Plant Reliability Data System (NPRDS). There have been 17 deviation reports written since 1988 due to missed TS surveillances. The root causes can be broken down as follows: management deficiency (6), personnel error (6), and inadequate procedure (5). The events have been corrected with departmental meetings, training, and procedure changes. A search of previous deviation reports yielded no similar occurrences of failure to procedurally meet TS requirements. Based on the corrective actions completed, no further action is necessary.

G. COMPONENT FAILURE DATA:

There were no component failures associated with this event.