

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 5
---	--	----------------------------

Title (4)
Valve Penetration Technical Specification Leakage Limits Exceeded During Local Leak Rate 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 3	1 4	9 4	9 4	-- 0 0 5	-- 0 0	0 4	1 1	9 4		0 5 0 0 0

OPERATING MODE (9) 02	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)							
POWER LEVEL (10) 0 0 0	<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 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 checked="" 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)		TELEPHONE NUMBER	
NAME Dan Brigl, Regulatory Assurance Ext. 3115	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) <input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE) <input type="checkbox"/> NO	Expected Submission Date (15)	Month 0 9	Day 0 1	Year 9 4
--	-------------------------------	----------------	--------------	---------------

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

A. ABSTRACT

At approximately 2330 on March 14, 1994, Quad Cities Unit-1 was shutdown for the cycle 13 refueling and maintenance outage. After Local Leak Rate Testing (LLRT) the "A" Main Steam Isolation Valves (MSIV), it was determined that the measured leakage rate of 15.8 standard cubic feet per hour (SCFH) in the inboard MSIV AO-1-203-1A exceeded the individual MSIV Technical Specification (3.7.A.2.a.3) leakage limit of 11.5 SCFH.

The outboard MSIV AO-1-203-2A had a measured leakage rate of .35 SCFH.

On March 17, 1994, at 0500 hours while performing LLRT on the Unit-1 Feedwater (FW) check valve 1-220-58B, the valve failed with an unquantified leakage.

The unquantified leakage exceeds the 0.6 La (293.75 SCFH) combined leakage limits specified in Technical Specification 3.7.A.2.a.2.

The root cause of the excessive leakages will not be known until repairs have been completed and the valves have been retested. Corrective actions are under way, and have not been completed at this time. A supplemental report will be issued when all as found LLRT's are complete and the cause of excessive primary containment leakages are identified.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev. 2.0

FACILITY NAME (1) Quad Cities Unit One	DOCKET NUMBER (2) 0 5 0 0 0 2 5 4	LER NUMBER (6)			PAGE (3) 2 OF 0 5
		Year 9 4	Sequential Number - 0 0 5	Revision Number - 0 0	

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: Valve/Penetration Technical Specification Leakage Limits exceeded during Local Leak Rate Testing.

A. CONDITIONS PRIOR TO EVENT:

Unit: One Event Date: March 14, 1994 Event Time: 2330
 Reactor Mode: 02 Mode Name: Refuel Power Level: 0

This report was initiated by Licensee Event 254\94-005.

REFUEL (2) - In this position interlocks are established so that one control rod only may be withdrawn when flux amplifiers are set at the proper sensitivity level and the refueling crane is not over the reactor. Also, the trip from the turbine control valves, turbine stop valves, main steam isolation valves, and condenser vacuum are bypassed. If the refueling crane is over the reactor, all rods must be fully inserted and none can be withdrawn.

B. DESCRIPTION OF EVENT:

At approximately 2330 on March 14, 1994, Quad Cities Unit-1 was shutdown for the cycle 13 refueling and maintenance outage. After Local Leak Rate Testing (LLRT) the "A" Main Steam Isolation Valves (MSIV) [SB] [ISV], it was determined that the measured leakage rate of 15.8 standard cubic feet per hour (SCFH) in the inboard MSIV AO-1-203-1A exceeded the individual MSIV Technical Specification (3.7.A.2.a.3) leakage limit of 11.5 SCFH.

The outboard MSIV AO-1-203-2A had a measured leakage rate of .35 SCFH.

On March 17, 1994, at 0500 hours while performing LLRT on the Unit-1 Feedwater (FW) check valve [SJ] [FCV] 1-220-58B, the valve failed with an unquantified leakage.

The unquantified leakage exceeds the 0.6 La (293.75 SCFH) combined leakage limits specified in Technical Specification 3.7.A.2.a.2 (combined leakage rate of all penetrations and valves, except the MSIV's, subject to type B and C tests of 10CFR, Appendix J).

Problem Identification Form (PIF) 94-0609 was generated by the LLRT Test Director to document the failed MSIV LLRT. The FW check valve, and any other primary containment valves or penetrations that fail LLRT with excessive leakage will be reported under the before mentioned PIF.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev. 2.0

FACILITY NAME (1) Quad Cities Unit One	DOCKET NUMBER (2) 0 5 0 0 0 2 5 4	LER NUMBER (6)						PAGE (3)				
		Year		Sequential Number			Revision Number					
		9 4	-	0 0 5	-	0 0	3 OF 0 4					

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

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with the requirements of the 10CFR 50.73(a)(2)(ii)(B). Any event or condition that resulted in the condition of the nuclear power plant, including its principal safety barriers being seriously degraded, or that resulted in the nuclear plant being in a condition that was outside the design basis of the plant.

The root cause of the excessive leakages will not be known until repairs have been completed and the valves have been retested. Corrective actions are under way, however, not completed at this time. A supplemental report will be issued when all as found LLRT's are complete and the cause of excessive primary containment leakages are identified.

D. SAFETY ANALYSIS OF EVENT:

The safety consequences of this event were minimal since LLRT is a conservative method for quantifying containment leakage. The actual leakage under accident conditions would be less than that determined by LLRT, because some of the lines would be filled with water rather than air, and some lines would be isolated by nonprimary containment isolation valves. Also, where more than one valve is present in a line, as in the case of the MSIV's, it is realistic to expect the leakage to be equal to the lesser leakage of the two valves. However, the maximum pathway leakage used for comparison with the Technical Specification requirements, which assumes the best valve fails to isolate the leakage, is equal to the greater leakage of the two valves.

E. CORRECTIVE ACTIONS:

No corrective actions have been completed at this time. A supplemental report will be issued which will document the valves and penetrations that had excessive leakage, what caused the leakage, and the corrective actions taken to bring all excessive primary containment leakages below the required LLRT limits (NTS# 2651809400501).

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev. 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		Year	Sequential Number	Revision Number	
Quad Cities Unit One	0 5 0 0 0 2 5 4	9 4	- 0 0 5	- 0 0	4 OF 0 4

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

F. PREVIOUS EVENTS:

A three year Nuclear Tracking System (NTS) historical search, for LER's associated with valve LLRT testing exceeding Technical Specifications, was conducted. The results of the search are included below.

LER #	Description
265/92-002	Unit-2 Valves 2-1601-21(22)(55)(56) Failed LLRT Leakage Limit.
254/92-020	Unit-1 Tech Spec Containment LLRT Exceeded Due To Various Component Failures.
254/93-007	Unit-1 B-Loop Main Steam Isolation Valve Local Leak Rate Exceeded 11.5 SCFH.
265/93-025	Unit-2 A-Loop Main Steam Isolation Valve Local Leak Rate Exceeded 11.5 SCFH.

G. COMPONENT FAILURE DATA:

Component failure data is not available at this time since repairs have not been completed. Failure data will be included in the Supplemental Report.