



Commonwealth Edison

Quad Cities Nuclear Power Station
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Telephone 309/654-2241

GGC-94-116

September 14, 1994

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) 94-009, Revision 00, for Quad Cities Nuclear Power Plant 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 event or condition that alone could have prevented the fulfillment of the safety function of structures or systems than are needed to mitigate the consequences of an accident.

The following commitments are being made by this letter:

1. An inventory of site sources was initiated on 8-9-94. A review of previous inventory records was also performed. This inventory and review was completed with all sources being accounted for.
2. All sealed sources that required a leak test but had been missed were tested. All sources tested showed no leakage.

LONG-TERM ACTIONS:

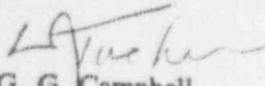
Prior to the next surveillance QRP 1520-2 will be converted into a QCRP and the following changes to the procedure will be made (NTS 2541809400901):

- a. Require independent verification of the inventory and leak test data.
- b. The inventory will be categorized into three distinct sections, Active Sources, Stored Sources and Disposed Sources.

If there are any questions or comments concerning this letter, please refer them to Nick Chrissotimos, Regulatory Assurance Administrator at 309-654-2241, ext. 3100.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD CITIES NUCLEAR POWER STATION

for 
G. G. Campbell
Station Manager

GGC/TB/jcs
Enclosure

cc:

cc: J. Schrage
C. Miller

210-13
INPO Records Center
NRC Region III

STMGR111694.GGC

9409230289 940915
PDR ADDCK 05000254
PDR

JE22

Licensee Event Report
Reviewer Assignment Form

Revised 08/10/94

LER # 254\94-009

Date: August 23, 1994

Subject: Failure to Maintain Current Source Inventory

Signatures of reviewers indicating review and approval of item:

Systems Eng. Supv:	<u><i>[Signature]</i></u>	<u>19/13/94</u>	<u>1</u>	<u> </u>
		Date		Date
Operating Eng.:	<u><i>CA Olsen for</i></u>	<u>9-13-94</u>	<u>1</u>	<u> </u>
		Date		Date
Technical Supt.:	<u><i>Al Bucknell for</i></u>	<u>9-13-94</u>	<u>1</u>	<u> </u>
		Date		Date
	<u><i>J.R. Power RPM</i></u>	<u>9-14-94</u>	<u>1</u>	<u> </u>
		Date		Date

Approved: *W.C. McLaughlin* 9/14/94
PORC Chairman
(If not Station Manager) Date

Approved: *L.J. Tucker* 9/15/94
for Station Manager Date

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 3				
Title (4) Failure To Maintain Current Source Inventory																			
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)						
											Quad Cities Unit 2		0 5 0 0 0 2 6 5						
0 8	2 3	9 4	9 4	--	0 0 9	--	0 0	0 9	1 5	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		<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 checked="" 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 Greg Powell, Rad Protection, Ext. 2744										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)		Month		Day		Year			
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO									
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-spaced typewritten lines) (16)																			

ABSTRACT:

During a review of the current inventory for sealed sources and records of leak testing on required sealed sources, a deviation from Technical Specification section 3.8/4.8.F was found.

Three Strontium-90 (Sr-90) sources that were to be disposed of as radwaste were removed from the inventory. The sources were stored in a barrel in the Radwaste High Level Bin. At a later date, it was determined that, due to the activity of the sources, they could not be disposed of. These sources were left in storage and never put back on the inventory. One of the sources was removed from storage, leak tested and put back into service, but was not verified to be on the current inventory. When the required six month leak testing was performed, this source was missed because it was not on the inventory.

One Cesium-137 (Cs-137) source missed the required leak testing because it had been inadvertently deleted from the inventory and subsequently missed again due to the units of activity being entered wrong on the inventory.

This event is being reported in accordance with 10CFR50.73(a)(2)(i)(B).

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 9	- 0 0	2 OF 0 3		

TEXT Energy Industry Identification System (EIIIS) 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: Failure to maintain current source inventory.

A. CONDITIONS PRIOR TO EVENT:

Unit: One Event Date: August 23, 1994 Event Time: 1130

Reactor Mode: 2 Mode Name: Refuel Power Level: 0%

This report was initiated by Licensee Event Report 254\94-009.

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.

FAILURE TO MAINTAIN CURRENT SOURCE INVENTORY

B. DESCRIPTION OF EVENTS:

During a review of the inventory and leak test program for sealed sources, omissions in the inventory and leak test paperwork were discovered. Technical Specification 3.8/4.8 F states that a complete inventory of radioactive materials in the licensee's possession shall be maintained current at all times, additionally, that each sealed source containing radioactive material in excess of 100 microcurie (μCi) shall be free of removable radioactive material.

1. In 1989, three 300 μCi Sr-90 sources were removed from the inventory. The sources were then stored in a barrel in the Radwaste High Level Bin. These sources were to be disposed of, but because of their activity, the burial site could not accept them. The sources had been removed from the inventory prior to finding out they could not be disposed of. The sources were never added back on the inventory. In 1993 one of the Sr-90 was removed from storage in radwaste, leak tested and put into use. When the next semi-annual leak test was being performed on all the required sealed sources, this source was missed because it was not on the inventory.
2. In 1990 a 10 millicurie (mCi) Cs-137 was dropped from the inventory. The source was put back on in 1992, but the units were in μCi instead of mCi. The removal from inventory and the incorrect units caused the source not to be leak tested until 1994 when the mistake was identified.

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 9	- 0 0	3 OF 0 3		

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

C. APPARENT CAUSE OF EVENTS:

1. Work practices, self-checking not applied to ensure expected response or correct units.
 - a. The individual who removed the Sr-90 from the 1989 inventory for disposal should have put them back on the inventory when they could not be sent to burial.
 - b. The individual performing the 1990 source inventory apparently did not transfer the Cs-137 source from the 1989 inventory to the 1990. This deletion was not noted until 1992. When the source was added back on the sources inventory, the units of activity were inadvertently typed as μ Ci instead of mCi. These mistakes lead to the source not being leak tested until this review of source inventory.

D. SAFETY ANALYSIS OF EVENT:

This event did not impact plant safety.

E. CORRECTIVE ACTIONS:

1. An inventory of site sources was initiated on 8-9-94. A review of previous inventory records was also performed. This inventory and review was completed with all sources being accounted for.
2. All sealed sources that required a leak test but had been missed were tested. All sources tested showed no leakage.

LONG-TERM ACTIONS:

Prior to the next surveillance QRP 1520-2 will be converted into a QCRP and the following changes to the procedure will be made (NTS 2541809400901):

- a. Require independent verification of the inventory and leak test data.
- b. The inventory will be categorized into three distinct sections, Active Sources, Stored Sources and Disposed Sources.

F. PREVIOUS EVENTS:

A search conducted for previous events involving source inventories found that no similar occurrences have been documented.

G. COMPONENT FAILURE DATA:

None.