



**Commonwealth Edison**

Quad Cities Nuclear Power Station  
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Telephone 309/654-2241

RLB-91-265

November 7, 1991

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) 91-020, 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 Specifications.

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

STMGR 220

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PDR ADDCK 05000254  
S PDR

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1/1

## LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Quad Cities Unit One  
 Title (4)  
 Docket Number (2) 0 | 5 | 0 | 0 | 0 | 2 | 5 | 4  
 Page (3) 1 | of | 0 | 4

Missed Off Gas Recombiner Technical Specification Surveillance (4.8.A.5) Due To Personnel Error

Event Date (5)			LER Number (5)			Report Date (7)			Other Facilities Involved (8)	
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Names	Docket Number(s)
0   9   1   9   9   1				0   2   0	0   0	1   1	0   6   9   1			0   5   0   0   0   1   1

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

POWER LEVEL (10)	1   0   0	20.402(b)	20.405(c)	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)	Other (Specify
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	in Abstract
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	below and in
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	Text)

## LICENSEE CONTACT FOR THIS LER (12)

Name Jim Bundschuh, Technical Staff Engineer, Ext. 2941  
 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	MANUFAC- TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	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:

On September 19, 1991, Unit One was in the RUN mode at 100% of rated core thermal power. The shift three Nuclear Station Operator (NSO) noticed that the recombimer temperatures had not been verified to be in the allowable band as required by Technical Specification 4.8.A.5 since shift three the previous day.

The recombimer temperature recorder was not working properly during shifts one and two on September 19, 1991. The shift one NSO tried to interpolate the temperature values, and notified the Shift Engineer of the malfunctioning recorder. The shift two NSO recognized that the recorder was not working, but took no corrective actions. The temperature recorder appears to have been in standby mode during this event. The recorder was repaired and disciplinary action was given to the shift two NSO for failing to notify the Shift Engineer of the problem.

This report is being written per 10CFR50.73(a)(2)(i)(b).

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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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 Off Gas Recombiner Technical Specification (4.8.A.5) Due To Personnel Error.

A. CONDITIONS PRIOR TO EVENT:

Unit: One                      Event Date: September 19, 1991 Event Time: 1500  
Reactor Mode: 4              Mode Name: RUN                      Power Level: 100%

This report was initiated by Deviation Report D-4-1-91-117.

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 September 19, 1991 at 1500 hours, Unit One was in the RUN mode at 100% rated core thermal power. The shift three Nuclear Station Operator (NSO) noticed that the Unit One Recombiner [RCB] could not have been verified to be within its allowable band during the previous two shifts. The NSO's are required to compare the current recombinder temperatures from the temperature recorder [TR] to the base-line plot of Recombiner Outlet Temperature vs. Reactor Power (QOP 5400-T5). This is required to be performed once every 8 hours per Technical Specification 4.8.A.5 and is documented by initialling form QOS 005-S1, Operations Department Weekly Summary of Daily Surveillances Unit One.

The temperature recorder for the Off Gas [WF] recombinder temperatures (1-5440-3) is located on the 901-54 panel in the control room. This recorder trends temperature over time on paper that has a corresponding temperature scale. This recorder has an option that will print the date, time, and numerical values for the temperature points. By printing the actual temperature values, the NSO creates a record of when he checked the recombinder temperature vs. base-line plot. This was not done during shifts one and two on September 19, 1991.

Previous to this event, the paper in the recorder would sometimes stick. This would cause the recorder to print over previous data. The shift one NSO thought this was the case and attempted to verify the recombinder temperatures versus the base-line plot by interpolating the points off of the recorder paper. He stamped the date on the paper near what he thought were current readings. He signed off QOS 005-S1 and notified the Shift Engineer that the recorder was not working properly.

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The shift two NSO stated that he could not verify that the recombiner temperatures were on the base-line plot, because the recorder was not working properly. However, he did sign the QOS 005-S1 stating that he did verify the temperature was on the base-line plot. The NSO assumed that the Shift Engineer knew the recorder was not working properly, and did not notify him of the problem.

The shift three NSO was able to get the recorder to print out the individual temperature values and noticed that this had not been done since shift three on September 18, 1991. He notified the Shift Engineer, who initiated this DVR.

Upon initial review, this event was mistakenly classified as a DVR by the Operating Engineer. On October 23, 1991, during the On-Site Review of this DVR, it was determined that this event should be reclassified as an LER.

C. APPARENT CAUSE OF EVENT:

This report is being written per 10CFR 50.73(a)(2)(i)(b): The licensee shall report any operation or condition prohibited by the plant's Technical Specifications.

This event was caused by two separate personnel errors. The shift one NSO did not verify that the data he used was current. The shift two NSO did not verify the recombiner was operating properly and then failed to notify the Shift Engineer of the problem as required by procedure QOS 005-1.

The shift one NSO thought the recorder was stuck and tried to verify the recombiner was operating properly by interpolating off of the chart paper, but he actually used data from the shift before his. He committed a personnel error because he did not verify that the data was current. He did take the proper corrective action as specified in QOS 005-1, Operations Department Weekly Summary of Daily Surveillances, by notifying the Shift Engineer.

The shift two NSO said he was unable to verify the recombiner was operating properly due to the malfunctioning temperature recorder, even though he signed off the procedure as having done so. The NSO assumed the Shift Engineer already knew the recorder was not working and did not notify anyone of the problem. This NSO committed a personnel error by not taking the proper corrective action.

Investigation of the temperature recorder chart paper, shows that the recorder appeared to be in standby mode and that the paper was not stuck during the two shifts that the surveillance was missed. Because of its history of sticking, the temperature recorder is considered to be a contributing factor to this event.

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

D. SAFETY ANALYSIS OF EVENT:

The safety consequences of this event were minimal, because the high and low temperature alarms were still operable and would have signaled if the temperature went out of range. Also, the recombiner temperatures were verified to be in the proper range during both the previous and following shifts.

E. CORRECTIVE ACTION:

The corrective action taken by the shift one NSO was to notify the Shift Engineer that the recorder was not working. This is required by procedure QOS 005-1.

The Instrument Maintenance Department replaced the chart drive and motor on the 1-5440-3 recorder on October 1, 1991 under Work Request Q94615. This recorder is scheduled to be replaced with a new model that has a digital display, which will allow the NSO's to verify the recombiner temperatures even if the recorder is not printing correctly (NTS# 2542009111701).

Performance of the individuals involved was reviewed and disciplinary action was administered as deemed appropriate.

This event will be discussed by the Operations Department during their weekly tailgate meetings (NTS #2542009111702).

F. PREVIOUS EVENTS:

A search of previous events over the last three years, found the following as missed Technical Specification surveillances due to personnel error.

DVR 04-01-90-078/LER 90-019 Missed T.S. surveillances on the main steam line radiation monitors due to operator misjudgments

DVR 04-01-90-105/LER 90-024 Missed T.S. surveillance for continuous fire watch due to personnel inattention

The corrective action for these two events involved counselling the individuals. This event is not considered to be related to either of these two previous events.

G. COMPONENT FAILURE DATA:

This event was due to personnel error.