



Commonwealth Edison

Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242-9740
Telephone 309/654-2241

RLB-93-026

February 5, 1993

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) 93-004, Revision 00, for Quad Cities Nuclear Power Station.

This report is being 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. I. Bax
R. I. Bax
Station Manager

RLB/TB/plm

Enclosure

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

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Quad Cities Unit Two										Docket Number (2) 0 5 0 0 0 2 6 5										Page (3) 1 of 0 4																			
Title (4) Missed Off Gas Recombiner Technical Specification Surveillances (4.8.A.5) Due To Personnel Error																																							
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 1			1 4			9 3			9 3			0 0 4			0 0			0 2			0 8			9 3									0 5 0 0 0 0 1 1						
OPERATING MODE (9) POWER LEVEL (10) 0 7 4										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)																													
										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		CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NPRDS		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-space typewritten lines) (16)																																							

ABSTRACT:

On January 14, 1993 at 0100 hours, Unit Two was in the RUN mode at 74 percent of rated core thermal power. The shift one Nuclear Station Operator (NSO) noticed that the recombining temperatures had not been verified to be in the allowable band during the previous four shifts as required by Technical Specification 4.8.A.5.

The missed surveillances were caused by personnel error with inadequate procedures as a contributing cause. The four NSO's confused two different Off Gas system surveillance requirements when they assumed that the recombining temperatures did not have to be verified while the reactor was at less than thirty percent of rated core thermal power.

The individuals were counselled on their mistakes and the procedures revised to more clearly reflect the Technical Specification requirements.

This report is being written in accordance with 10CFR50.73(a)(2)(i)(b): The licensee shall report any operation or condition prohibited by the plant's Technical Specifications.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				Page (3)	
		Year	Sequential Number	Revision Number			
Quad Cities Unit Two	0 5 0 0 0 2 6 5	9 3	- 0 0 4	- 0 0	0 2	OF	0 4
TEXT Energy Industry Identification System (EIIS) 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 surveillances (4.8.A.5) due to personnel error.

A. CONDITIONS PRIOR TO EVENT:

Unit: Two Event Date: January 14, 1993 Event Time: 0100
Reactor Mode: 4 Mode Name: RUN Power Level: 74%

This report was initiated by Deviation Report D-4-2-93-006.

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 January 14, 1993 at 0100 hours, Unit Two was in the RUN mode at 74 percent of rated core thermal power. The shift one Nuclear Station Operator (NSO) noticed that the Unit Two Recombiner [RCB] had not been verified to be within allowable band during the previous four shifts. The NSO's are required to compare the current recombinder temperatures from the temperature recorder (2-5440-7) [TR] to the base-line plot of Recombiner Outlet Temperature vs. Reactor Power (QOP 5400-T7). This is required to be performed once every eight hours in accordance with Technical Specification 4.8.A.5 and is documented by initialling form QOS 005-S19, Operations Department Weekly Summary of Daily Surveillances Unit Two.

During the previous four shifts, Unit Two was at lower power levels during start-up following a forced outage. Technical Specification 3.8.A.5 requires that the recombinder be operable whenever the reactor is above 900 pounds per square inch (psi). During this start-up, the NSO's had written "<30% instead of initialling the space on QOS 005-S19. The improper notations were noticed by the shift one NSO on January 14, 1993, who immediately notified the Shift Control Room Engineer (SCRE). The NSO and SCRE determined that the Unit Two reactor pressure reached 1000 psi during shift three on January 12, 1993. The SCRE initiated a Deviation Report (DVR) to document the four missed surveillances.

On January 14, 1993 at 0100 hours, conditions were verified to be stable with the reactor at 74 percent of rated core thermal power and recombinder temperatures within the allowable range.

There were no other systems or components inoperable at the beginning of this event which could have contributed to this event.

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						Year	Sequential Number	Revision Number															
Quad Cities Unit Two		0	5	0	0	0	2	6	5	9	3	-	0	0	4	-	0	0	0	3	OF	0	4
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]																							

C. APPARENT CAUSE OF EVENT:

This report is being written in accordance with 10CFR50.73(a)(2)(1)(b): The licensee shall report any operation or condition prohibited by the plant's Technical Specifications.

The cause of this event was personnel error, with inadequate procedures as a contributing cause. The personnel error occurred when the four NSO's failed to check the recombiner temperatures and wrote "<30%" instead of initialling the surveillance. QOS 005-S19 does not provide any guidance on when to verify that the recombiner is operable.

While performing QOS 005-S19, the first NSO confused having the Off Gas Charcoal Adsorbers on line at power levels above thirty percent with verifying that the recombiner was operable. This mistake was augmented by the recombiner temperature profile curves beginning at twenty-five percent instead of less than one percent of rated core thermal power when the reactor pressure first reaches 900 psi.

The NSO's on the three following shifts repeated the same mistakes the first NSO made by writing "<30%" instead of performing the surveillance and initialling the procedure.

D. SAFETY ANALYSIS OF EVENT:

The safety consequences of this event were minimal because the recombiner was still performing its design function. This was shown by the increase in the recombiner temperature on the recombiner temperature recorder and by the lack of hydrogen present in the Off Gas system documented on the hydrogen analyzer recorder.

In addition, Technical Specification 3.8.A.5 allows the recombiner to be inoperable for 48 hours and the recombiner was never out of its allowable band.

E. CORRECTIVE ACTIONS:

The immediate corrective action was to have the NSO verify that the recombiner was within the allowable band for the current operating conditions. The NSO then notified the SCRE of the situation and a DVR was initiated.

QOS 005-S19 and S1 will be revised to specifically state that the recombiner must be verified to be in the allowable band whenever the reactor pressure is above 900 psi. Recombiner temperature profile curves QOP 5400-T4, T5, T6 and T7 will be revised to include an allowable band for rated core thermal powers less than 25 percent.

The individuals involved were counseled on their mistakes and no further disciplinary action will be taken.

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This event will also be discussed by the Operations Department during their weekly tailgate meetings (NTS# 2652009300601).

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.

- LER 1-92-016 Missed Tech Spec. Surveillance on Fire Valve 1-4199-72 not being verified during QOS 4100-S3 due to a personnel error during the review process.
- LER 2-91-013 Entering EGC without performing the required surveillance due to a personnel error.
- LER 1-91-020 Missed Off Gas Recombiner Technical Specification Surveillance (4.8.A.5) due to personnel error.
- LER 1-90-019 Missed T.S. surveillances on the main steam line radiation monitors due to operator misjudgments.
- LER 1-90-024 Missed T.S. surveillance for continuous fire watch to personnel inattention.

The corrective actions for these events involved counselling the individuals involved. The personnel error committed by the NSO's was different and not related to the previous missed recombinder surveillance. This event is not considered to be related to any of the other four previous event identified.

G. COMPONENT FAILURE DATA:

This event was not caused by a component failure.