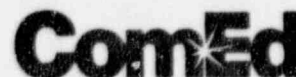


Commonwealth Edison Company  
Quad Cities Generating Station  
22710 206th Avenue North  
Cordova, IL 61242-9740  
Tel 309-654-2241



LWP-97-009

January 30, 1997

United States Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Document Control Desk

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

Enclosed is Licensee Event Report (LER) 97-001, 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.

There are no commitments being made by this letter.

If there are any questions or comments concerning this letter, please refer them to Charles Peterson, Regulatory Affairs Manager at 309-654-2241, ext. 3602.

Respectfully,

COMMONWEALTH EDISON COMPANY  
QUAD CITIES NUCLEAR POWER STATION

A handwritten signature in dark ink, appearing to read 'L. W. Pearce', is written over the typed name.

L. W. Pearce  
Station Manager

LWP/CP/plm

Enclosure

cc: A. B. Beach, Regional Administrator, Region III  
R. M. Pulsifer, Project Manager, NRR  
C. G. Miller, Senior Resident Inspector, Quad Cities  
R. J. Singer, MidAmerican Energy Company  
D. C. Tubbs, MidAmerican Energy Company  
P. L. Piet, Licensing, ComEd  
F. A. Spangenberg, Regulatory Affairs Manager, Dresden  
INPO Records Center

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LICENSEE EVENT REPORT (LER)															Form Rev. 2.0	
Facility Name (1) <b>Quad Cities Unit One</b>										Docket Number (2) <b>0   5   0   0   0   2   5   4</b>					Page (3) <b>1   of   0   5</b>	
Title (4) Technical Specification required instrumentation readings were not completed within the required time frequency after changing from eight hour to twelve hour shifts because the consequences associated with changing shift duration were not adequately reviewed or assessed.																
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   5   0   0   0				
0   1	0   7	9   7	9   7	--	0   0   1	--	0   0	0   1	3   0	9   7		0   5   0   0   0				
OPERATING MODE (9)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)													
POWER LEVEL (10) <b>1   0   0</b>			<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 <b>Charles Peterson, Regulatory Affairs Manager, ext. 3602</b>										TELEPHONE NUMBER AREA CODE <b>3   0   9   6   5   4   -   2   2   4   1</b>						
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		
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO						
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)																

### ABSTRACT:

It was discovered on 011797, that on the 010797 day shift, with Unit One in Mode One at 100% power, some of the Technical Specification (TS) required, once per shift channel check readings were not completed within the required 12 hour time interval plus 25% maximum allowable extension. A review showed that approximately 18 hours elapsed between the recording of the night shift readings and the day shift readings.

The cause of this event was a cognitive personnel error. The consequences associated with changing to twelve hour shifts were not adequately reviewed or assessed. The timeliness of taking readings was discussed prior to going on twelve hour shifts, but the TS requirements were not thoroughly reviewed by the procedure writer, reviewers or approver. On 010997, (prior to discovery of this incident) administrative controls were added to the daily surveillance procedure to ensure the TS surveillance interval is not exceeded.

There was no safety significance to the station or the health and safety of the public as a result of this event. Each monitored parameter has four sensors to provide redundant protection. The readings were completed within approximately 18 hours of each other during consecutive twelve hour shifts and each of the readings were found within the Technical Specification limits.

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) <table border="1"> <tr> <td>Year</td> <td></td> <td>Sequential Number</td> <td>Revision Number</td> </tr> <tr> <td>9   7</td> <td>-</td> <td>0   0   1</td> <td>-</td> </tr> </table>	Year		Sequential Number	Revision Number	9   7	-	0   0   1	-	PAGE (3)  2   OF   0   5
Year		Sequential Number	Revision Number								
9   7	-	0   0   1	-								

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: Technical Specification required instrumentation readings were not completed within the required time frequency after changing from eight hour to twelve hour shifts because the consequences associated with changing shift duration were not adequately reviewed or assessed.

A. CONDITIONS PRIOR TO EVENT:

Unit: One	Event Date: January 7, 1997	Event Time: 1100
Reactor Mode: 1	Mode Name: POWER OPERATION	Power Level: 100%

This report was initiated by Licensee Event Report 254\97-001.

Power Operation (1) - Mode switch in the RUN position with average reactor coolant temperature at any temperature.

B. DESCRIPTION OF EVENT:

On the 010797 day shift, with Unit One in Mode One at 100% power, the Technical Specification (TS) required, once per shift channel check readings were not completed within the required 12 hour time interval plus 25% maximum allowable extension for the following instrumentation:

- Isolation Actuation [JM] Instrumentation, Reactor Vessel Water Level (TS table 4.2.A-1)
- Anticipated Transient Without Scram (ATWS) [JC] Recirculation Pump Trip (RPT) Instrumentation, Reactor Water Level and Reactor Vessel Pressure (TS table 4.2.C-1)

On 092396, implementation of the upgraded Technical Specifications established a specific surveillance frequency definition. Because the Operators worked eight hour shifts, Operating Management believed the normal Operating practice of taking readings at the beginning of each shift would meet the surveillance requirements, and decided that no procedural guidance was necessary for what time during the shift readings were to be taken. All TS required once per 12 hour readings were taken three times per day and all TS required once per 24 hour readings were taken once per day on the same shift each day.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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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		3   OF   0   5	
		9   7   -		0   0   1   -		0   0			
TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]									

On 010697, the Nuclear Station Operators (NSO) and the non-licensed Operators (NLO, consisting of Equipment Operators and Equipment Attendants) began working twelve hour shifts. On that day, procedure revisions were implemented changing the Operator rounds, including the TS required readings, from once per eight hours to once per twelve hours. The revision included procedural guidance that the readings normally should be completed between 0700 and 1100 hours on day shift and between 1900 and 2300 hours on night shift. However this was not stated as a requirement.

On 010997, an Operating procedure writer raised the question: Does the TS surveillance requirement apply to the TS required readings? Operating Management determined that TS required once per shift readings are to be taken at least once per twelve hours plus a 25% grace period, or within 15 hours of each other. Daily readings are required at least once per 24 hours plus a 25% grace period, or within 30 hours of each other. To meet the TS requirement, the surveillance procedure was revised that day to add a limitation and action requiring the TS readings to be completed in a specified time period and add a procedure step for the operator to record the time the TS readings were completed. A Problem Identification Form (PIF) was initiated to document that this completion time had not been recorded in the past to ensure TS readings were taken within the required time interval.

During investigation of that PIF, the Operators who were assigned to take TS readings since the start of twelve hour shifts on 010697 were asked to try to remember or estimate what time they recorded the TS required readings on those shifts. The Operators had reasonable confidence that all TS readings were taken within the required time period with one exception.

On 011797, it was discovered that some of the Unit One Equipment Operator TS required readings for 010797 day shift were not completed within the required time interval.

The Equipment Operator stated in his interview that he was busy performing the Unit One Emergency Diesel Generator (EDG) surveillance that was started early on the shift. Between each of the hourly readings required during the EDG surveillance, the Equipment Operator took his in plant readings. He did not get to the Auxiliary Electric Equipment room or the Cable Spreading room until approximately 1400 hours. A review of the security card reader history showed that approximately 18 hours elapsed between the recording of the reactor water level and reactor vessel pressure night shift readings and the day shift readings.

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   7   -		0   0   1		-   0   0		
TEXT				Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]								4   OF   0   5		

**C. APPARENT CAUSE OF EVENT:**

The cause of this event was a cognitive personnel error. The consequences associated with changing to twelve hour shifts were not adequately reviewed or assessed. When the surveillance procedures were revised for the upgraded TS, guidance was not provided on a time limit for taking readings because the Operators were working eight hour shifts. The timeliness of taking readings was discussed prior to going on twelve hour shifts, but the TS requirements were not thoroughly reviewed by the procedure writer, reviewers or approver. The requirements of the twelve hour readings were consistent with the previous eight hour readings. The possibility of exceeding the time frequency existed with eight hour shifts, but was so remote that no specific time limits were included in the procedure.

**D. SAFETY ANALYSIS OF EVENT:**

There was no safety significance to the station or the health and safety of the public as a result of this event. Each monitored parameter has four sensors to provide redundant protection. The readings were completed within approximately 18 hours of each other during consecutive twelve hour shifts and each of the readings were found within the Technical Specification limits.

**E. CORRECTIVE ACTIONS:**

Corrective Actions Completed:

- The channel check readings were performed at approximately 1400 hours on 010797.
- On 010997, administrative controls were added to the daily surveillance procedure to ensure the TS surveillance interval is not exceeded.
- The personnel involved in writing, reviewing and approving this procedure have been counseled.
- On 012297, the License Coordinator completed a review of procedures identified as implementing significantly changed surveillance requirements in the upgraded TS to ensure that they did correctly implement the designated requirement. One PIF was written for a potential missed surveillance. The investigation determined that, for this issue, no surveillances were missed.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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FACILITY NAME (1)  Quad Cities Unit One	DOCKET NUMBER (2)  0   5   0   0   0   2   5   4	LER NUMBER (6)			PAGE (3)  5   OF   0   5
		Year	Sequential Number	Revision Number	
		9   7   -	0   0   1   -	0   0	
TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]					

**F. PREVIOUS EVENTS:**

A review of previous Licensee Event Reports (LER) at Quad Cities Station Units One and Two, since 010195 concerning missed Technical Specification surveillances, missed Technical Specification action statements, missed surveillances, and Operating department cognitive personnel errors revealed the five previous events listed below:

- |              |  |
|--------------|--|
| LER 1-95-006 | The Reactor mode switch was taken out of shutdown prior to completing a required Technical Specification surveillance due to a procedure deficiency.   |
| LER 1-96-018 | Technical Specification surveillance requirements were misinterpreted due to a conservative misunderstanding of the requirement.   |
| LER 1-96-014 | Electrical distribution weekly surveillance did not document voltage verification in accordance with Technical Specification 4.9.E. due to an inadequate procedure.  |
| LER 1-96-024 | The Control Room Heating Ventilation and Air Conditioning Isolation System was inadequately tested due to a cognitive personnel error, which resulted in credit being taken for a Technical Specification requirement by a procedure that did not contain steps to satisfy that Technical Specification requirement. |
| LER 1-96-017 | Manual Scram taken during reactor startup when reactor water level increased following unplanned opening of all main turbine bypass valves due to an inadequate procedure.   |

**G. COMPONENT FAILURE DATA:**

There is no component failure associated with this event.