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August 18, 2003

Cordova, IL 61242-9740

SVP-03-090

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

> Quad Cities Nuclear Power Station, Unit 2 Facility Operating License No. DPR-30 NRC Docket No. 50-265

Subject: Licensee Event Report 265/03-003, "Low Pressure Coolant Injection Differential Pressure Instrument Inoperable due to Misposition of Instrument Valve"

Enclosed is Licensee Event Report (LER) 265/03-003, "Low Pressure Coolant Injection Differential Pressure Instrument Inoperable due to Misposition of Instrument Valve," for Quad Cities Nuclear Power Station, Unit 2.

This report is submitted in accordance with the requirements of the Code of Federal Regulations, Title 10, Part 50.73(a)(2)(i)(B), which requires reporting of any operation or condition which was prohibited by the plant's Technical Specifications.

Should you have any questions concerning this report, please contact Mr. W. J. Beck at (309) 227-2800.

Respectfully,

Vimothy J. Tulon Site Vice President Quad Cities Nuclear Power Station

cc: Regional Administrator – NRC Region III NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

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NRC FORM 366 U.S. NUCLEAR REGULATORY					APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004											
(7-2001) COMMISSION						Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bis1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.										
1. FACILITY NAME						2. DOCKET NUMBER					3. PAGE					
0	Quad Cities Nuclear Power Station Unit 2					_	05000265					1 of 3				
4. TITLE Low Pressure Coolant Injection Differential Pressure Instrument Inoperable due to Misposition of Instrument Valve																
5	. EVENT DAT	E	6.	LER NUMBER		7.1	REPORT DATE			8	FACILITIES INVOLVED					
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9. OPERA	TING			11. THIS REPO	RT IS					1			_			
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Wally Beck, Regulatory Assurance Manager						TELEPHONE NUMBER (Include Area Code) (309) 227-2800										
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																
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14. SUPPLEMENTAL REPORT EXPECTED									15. EXPEC		MON	ПН	DAY	YEAR		
YES (If yes, complete EXPECTED SUBMISSION DATE) X NO DATE																

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On June 20, 2003, a differential pressure instrument isolation valve was found isolated, rendering the instrument inoperable. The other three differential pressure switches that provide the one-out-of-two-twice logic to direct injection of the Low Pressure Coolant Injection system to the intact reactor recirculation pipe during a loss of coolant event were verified to be operable. The surveillance in progress was completed, the switch was tested satisfactorily and the manifold valves were returned to the in-service position.

A work history review identified that the valve was left closed following a March 24, 2003, surveillance. A search of the work history involving the individuals that performed the March 24, 2003, surveillance did not identify any discrepancies.

The safety significance of this event was minimal. The remaining three switches were operable and capable of providing the required logic signal. Therefore, there was no loss of safety function associated with this event.

The root cause for this event is a breakdown in the use of human performance tools. Corrective actions include a revision to Human Performance training and development of a human performance improvement program for the Instrument Maintenance Department.

NRC FORM 366A (7-2001)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)		PAGE (3)		
Quad Cities Nuclear Power Station Unit 2	05000265	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
· · · · · · · · · · · · · · · · · · ·		2003	003	00	2 of 3

(If more space is required, use additional copies of NRC Form 366A)(17)

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor, 2957 Megawatts Thermal Rated Core Power

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

EVENT IDENTIFICATION

Low Pressure Coolant Injection Differential Pressure Instrument Inoperable due to Misposition of Instrument Valve

A. CONDITION PRIOR TO EVENT

Unit: 2	Event Date: March 24, 2003	Event Time: 2013 hours
Reactor Mode: 1	Mode Name: Power Operation	Power Level: 100%

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

B. DESCRIPTION OF EVENT

On June 20, 2003, during performance of a functional test on the Low Pressure Coolant Injection (LPCI) [BO] recirculation riser differential pressure switches [63], it was discovered that the high-side isolation valve [ISV] for one of the differential pressure switches was closed, rendering the instrument inoperable. There are four of these differential pressure switches, and they provide a one-outof-two-twice logic for the LPCI Loop Select System. This system directs the LPCI system to inject to the intact reactor recirculation pipe during a loss of coolant event.

The positions of the manifold values on the other three switches were inspected, and the values were found to be in their proper positions. Also, it was determined that no work was performed on these switches between March 24, 2003 and June 20, 2003. Therefore, with the other three switches operable, the function was not lost.

The surveillance in progress was completed, the switch was tested satisfactorily and the manifold valves were returned to the in-service position.

A work history review identified that the last work performed that would have affected the mispositioned valve was completed on March 24, 2003; therefore, this event is reportable as a condition prohibited by Technical Specifications, since the instrument was inoperable longer than the allowed outage time.

A review of the March 24, 2003 surveillance test found that the steps for restoration and verification of proper restoration were signed. The two individuals who performed the surveillance on March 24, 2003, could not be interviewed, as they were no longer employed with Exelon Generation Company, LLC. A search of the work history involving these two individuals for any safety related work where they acted alone in the field or together with no other support was conducted. This review went back one year. No discrepancies were identified.

NRC FORM 366A (7-2001)

NRC FORM 366A (7-2001)	· · ·		U.S. NUCLEAR REGULATORY COMMISSION							
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION										
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(If more space is required, use additional copies of NRC Form 366A)(17)

C. CAUSE OF EVENT

The root cause for this event has been determined to be a breakdown in the use of human performance tools. Specifically, concurrent verification practices were not adequately utilized in this case.

D. SAFETY ANALYSIS

The safety significance of this event was minimal. The remaining three switches were operable and capable of providing the required logic signal. Therefore, there was no loss of safety function associated with this event.

E. CORRECTIVE ACTIONS

Immediate Actions

The instrument valves on all eight of the differential pressure switches on Unit 1 and Unit 2 were verified to be in the correct position.

All Instrument Maintenance crews were briefed on this issue as they came on shift.

Corrective Actions to be Completed

Instrument Maintenance Department (IMD) Management will review and revise the IMD Human Performance Training Program and Dynamic Learning Activities to include more stringent guidelines and more stringent pass/fail criteria.

IMD Management will conduct paired field observations and provide remediation to personnel upon discovery of inadequate performance in use of the human performance tools.

IMD Management will develop a Human Performance improvement plan to include IMD first-line supervisor performance.

F. PREVIOUS OCCURRENCES

No reportable events were identified during the last two years that involved a failure in the IMD to utilize human performance tools.

G. COMPONENT FAILURE DATA

There were no component failures associated with this event.