



Nebraska Public Power District

COOPER NUCLEAR STATION
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TELEPHONE (402) 825-3811

CNSS923542

February 10, 1992

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 92-001, Revision 0, is being forwarded as an attachment to this letter.

Sincerely,

J. M. Meacham
Division Manager of
Nuclear Operations
Cooper Nuclear Station

JMM/bjs

Attachment

cc: R. D. Martin
G. R. Horn
R. E. Wilbur
V. L. Wolstenholm
D. A. Whitman
INPO Records Center
NRC Resident Inspector
R. J. Singer
CNS Training
CNS Quality Assurance

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Handwritten initials/signature

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <p style="text-align:center;">Cooper Nuclear Station</p>	DOCKET NUMBER (2) 0 5 0 0 0 2 9 8	PAGE (3) 1 OF 0 3
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TITLE (4) **Group 3 High Flow Isolation While Shifting Reactor Water Cleanup Pumps As A Result Of An Insufficiently Throttled Valve**

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	1	9	2	9	2	0	0	0	1	0	0	0	0	2	1	0	9	2	0	5	0	0	0

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)									
POWER LEVEL (10) 1 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(e)	<input checked="" type="checkbox"/> 60.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 60.36(e)(1)	<input type="checkbox"/> 60.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 60.36(e)(2)	<input type="checkbox"/> 60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 60.73(a)(2)(i)	<input type="checkbox"/> 60.73(a)(2)(vii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 60.73(a)(2)(ii)	<input type="checkbox"/> 60.73(a)(2)(vii)(B)							
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 60.73(a)(2)(iii)	<input type="checkbox"/> 60.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME John R. Myers	TELEPHONE NUMBER
	AREA CODE: 4 0 2 8 2 5 - 3 8 1 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)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On January 11, 1992, with the plant in normal power operation, the B Reactor Water Clean Up (RWCU) pump was started to transfer operation from the A to the B RWCU pump. Shortly after starting the pump, the licensed operator observed the RWCU high flow alarm, and then the closure of the RWCU Primary Containment isolation valves and actuation of the Primary Containment Group 3 indication lights. The RWCU Filter/Demineralizers had been previously removed from service, and the bypass valve, RWCU-MOV-MO74, was throttled to maintain normal pump discharge pressure.

The isolation resulted from insufficient throttling of the RWCU-MOV-MO74 valve. This allowed the combined flow from both pumps to exceed the setpoint of the high flow isolation switch. With the Filter/Demineralizers isolated, system flow indication is not available in the Control Room. The system operating procedure will be revised to direct the use of local flow indications when shifting pumps with the Filter/Demineralizers isolated.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (IP-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Cooper Nuclear Station	DOCKET NUMBER (2) 0 5 1 0 0 0 2 9 8	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 2	— 0 0 1	— 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 350A's) (17)

A. Event Description

On January 11, 1992, with the plant in normal power operation, the B Reactor Water Clean Up (RWCU) pump was started to transfer operation from the A to the B RWCU pump to perform post maintenance testing of the B pump. Shortly after starting the pump, the licensed operator observed the RWCU high flow alarm, and then the closure of the Primary Containment RWCU isolation valves and actuation of the Primary Containment Group 3 indication lights. The RWCU Filter/Demineralizers had been previously removed from service, and the bypass valve, RWCU-MOV-MO74, was throttled to maintain normal pump discharge pressure.

B. Plant Status

The plant was in normal power operation at approximately 100 percent power, with the Reactor at 1000 psig. The RWCU Filter/Demineralizers were removed from service, and the bypass valve, RWCU-MOV-MO74 throttled open. The A RWCU pump was in operation.

C. Basis for Report

Unplanned actuation of the Primary Containment Group 3 Isolation, an Engineered Safety Feature (ESF), reportable in accordance with 10CFR50.73(a)(2)(iv).

D. Cause

Procedures less than adequate. The isolation resulted from insufficient throttling of the RWCU-MOV-MO74 valve. This allowed the combined flow from both pumps to exceed the setpoint of the isolation switch. The cause of the insufficient throttling of the RWCU-MOV-MO74 valve is the lack of Control Room flow indication when the Filter/Demineralizers are removed from service. Valve position was set using the available pump discharge pressure indication.

E. Safety Significance

The RWCU high flow isolation serves to protect against the consequences of significant leakage from the RWCU system. The automatic closure of the RWCU inlet isolation valves upon actuation of the high flow isolation protects the core by preventing continued inventory losses through a break. In this event, an RWCU break had not occurred. Consequently, actuation of the Group 3 isolation was not required for core protection. Upon sensing a high flow signal, the isolation occurred as designed.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (F-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Cooper Nuclear Station	DOCKET NUMBER (2) 0 5 0 0 0 2 9 8 9 2	LER NUMBER (6)			PAGE (3)		
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

F. Safety Implications

The effect of a high flow isolation at other plant conditions would not be significantly different. In the event of an isolation with the RWCU pumps operating, the pumps automatically trip. Removal of the RWCU System from operation has minimal safety implications.

G. Corrective Action

The Group 3 isolation was reset, and the B pump placed into operation. The system operating procedure will be revised to direct the use of local flow indications when shifting pumps with the Filter/Demineralizers isolated.

H. Similar Events

None - Previous high flow actuations of the Group 3 isolation circuitry have been caused by flashing of the hot fluid at the pump suction during plant cooldown or as a result of voids within system components. The corrective actions for these events is not applicable to this occurrence.