Nebraska Public Power District

COOPER NUCLEAR STATION
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CNSS913938

December 10, 1991

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 91-016, 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

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Cooper Nuclear Station	0 5 0 0 0 2 9 8	1 OF 0 3

TITLE (4) Spurious RPS Trip While Shutdown Due To Decontamination Activities Under The Reactor Vessel

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
1 1	1 0	9 1	9 1	—	0 1 6	—	0 0	1 2	1 0	9 1		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Donald L. Reeves, Jr.	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)		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)

On November 10, 1991, at 10:41 p.m., a spurious RPS trip occurred when a contractor assigned to decontamination work in the Drywell bumped his head on Nuclear Instrumentation (NI) assemblies while on the equipment platform under the reactor vessel. This incident caused an Intermediate Range Monitor (IRM) to spike to the Hi-Hi trip setpoint. At the time of the event the plant was shut down for the 1991 Refueling Outage, with all fuel off loaded into the Spent Fuel Storage Pool. Final preparations for reloading fuel into the reactor vessel were in progress. These preparations included activating the RPS non-coincidence trip function, such that actuation of a single NI channel would result in a full scram.

The root cause of this event is considered to be a programmatic deficiency, in that while the potential for an RPS trip was recognized, sufficient precautions were not taken to preclude its occurrence. Upon activating the non-coincidence trip function, decontamination work (and any other non-critical activity) that could potentially disturb the response of the NI System and cause a trip should not have been permitted.

Decontamination activities under the reactor vessel were suspended until fuel loading was completed and the RPS non-coincidence trip function was deactivated. Prior to the next refueling outage, pertinent procedures will be upgraded to provide additional guidance associated with plant operational activities when the non-coincidence trip function is activated.

A. Event Description:

On November 10, 1991, at 10:41 p.m., a spurious RPS trip occurred when a contractor assigned to decontamination work in the Drywell apparently bumped his head on Nuclear Instrumentation (NI) assemblies while on the equipment platform under the reactor vessel. This incident caused an Intermediate Range Monitor (IRM) to spike to the Hi-Hi trip setpoint. Under normal plant conditions, actuation of one IRM channel would cause only a half scram. However, with the RPS non-coincidence trip function activated in anticipation of fuel reload, the actuation of the single nuclear instrument channel resulted in a full scram.

B. Plant Status

Shutdown with all fuel removed from the vessel, making final preparations for commencing fuel reload. At the time of the event, sixty-three (63) control rod drives (CRD) were fully withdrawn and valved out of service. The remainder were valved in service and fully inserted.

C. Basis for Report

Spurious actuation of the RPS, resulting in application of CRD accumulator pressure to seventy-four (74) Control Rod Drives. This event is reportable in accordance with 10CFR50.73 (a)(2)(iv).

D. Cause

The root cause of this event is considered to be a programmatic deficiency in that while the potential for an RPS trip was recognized, sufficient precautions were not taken to preclude its occurrence. Upon activating the non-coincidence trip function, decontamination work (and any other non-critical activity) that could potentially disturb the response of the NI system and cause a trip should not have been permitted.

E. Safety Significance

At the time of the event, the reactor was defueled and sixty-three (63) of the control rod drives were fully withdrawn and valved out of service. The remaining seventy-four (74) drives were fully inserted and were subjected to CRD accumulator pressure when the trip occurred. There were no other effects.

F. Safety Implications

This event was not of any significance in this plant condition, and the activity that led to it would not have been performed in any other operational mode.

G. Corrective Action

Decontamination activities under the reactor vessel were suspended until fuel loading was completed and the RPS non-coincidence trip function was deactivated.

Prior to the next refueling outage, pertinent procedures will be upgraded to provide additional guidance associated with plant operational activities when the non-coincidence trip function is activated.

H. Similar Events

None.