



Nebraska Public Power District

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CNSS923517

January 13, 1992

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 91-021, 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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DR ADOCK 05000298
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Cooper Nuclear Station	DOCKET NUMBER (2) 0 5 0 0 0 2 9 8	PAGE (3) 1 OF 0 3
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TITLE (4) **Diesel Generator Start And ESF Group Isolations During Surveillance Testing Due To Human Miscue**

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										
1	2	1	4	9	1	0	2	1	10	0	0	1	1	3	9	2			
									DOCKET NUMBER(S)										
									0 5 0 0 0										
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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) 0 0 0	20.402(b)	20.406(c)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)
	20.406(a)(1)(ii)	80.36(a)(1)		80.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(iii)	80.36(a)(2)		80.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)
	20.428(a)(1)(iii)	80.73(a)(2)(i)		80.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	80.73(a)(2)(ii)		80.73(a)(2)(viii)(B)	
	20.406(a)(1)(v)	80.73(a)(2)(iii)		80.73(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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On December 14, 1991, at 9:38 am, with the plant in Cold Shutdown for a refueling outage, an automatic start of the #1 Diesel Generator and actuation of the Group 2 Isolation (Shutdown Cooling), Group 3 Isolation (Reactor Water Cleanup), Group 6 Isolation (Reactor Building, including Standby Gas Treatment start), and Group 7 Isolation (Reactor Coolant Sampling) occurred. Licensed personnel were in the process of timing two relays to determine the reason for discrepancies in previously reported test results. While performing the surveillance procedure, a step which would block the undervoltage trip of Breaker 1FA was overlooked. Upon actuating the test switch, Breaker 1FA tripped, resulting in the actuations. The Reactor was in cold shutdown, with a Reactor coolant temperature of 150 degrees Fahrenheit. All equipment functioned as designed.

The cause of this event was the inadvertent failure of the licensed operator to perform an action specified by the procedure. A contributing cause was the use of a normal surveillance procedure with a significant number of steps marked "Not Applicable (N/A)". This resulted in the steps to be performed being separated by several pages.

The personnel involved in this event will be counselled, and this event will be covered in Industry Events Training.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20585, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (8)

PAGE (3)

Cooper Nuclear Station

YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
91	021	00	02	OF 03

TEXT (if more space is required, use additional NRC Form 360A's) (17)

A. Event Description

On December 12, 1991, Surveillance Procedure 6.2.2.1.10, 4160 V Buses 1F and 1G Undervoltage Relays and Relay Timers Functional Test, was performed. Undervoltage relays 27X7/1F and 27X7/1G were initially thought to be out of specification when timed using a stopwatch. Subsequent timing using a digital timer indicated correct timing of the relays. Following consultation between Engineering personnel, the Surveillance Coordinator, and the Shift Supervisor, on December 14, it was determined that correct performance of the relays could be verified by re-performing appropriate portions of the Surveillance Procedure. A licensed operator marked up the procedure to "Not Applicable (N/A)" the steps to be omitted. After receiving Shift Supervisor permission to commence the procedure, the licensed operator, a second operator, and three Engineering personnel proceeded to the Switchgear Room to conduct the procedure. In performing the procedure, the step to block the undervoltage trip of Breaker 1FA was overlooked. Thus, when the subsequent step to test relay 27X7/1F was commenced at 9:33 am, the undervoltage circuitry sensed the simulated undervoltage condition and tripped Breaker 1FA. This resulted in starting the #1 Diesel Generator and actuation of the Group 2 Isolation (Shutdown Cooling), Group 3 Isolation (Reactor Water Cleanup), Group 6 Isolation (Reactor Building, including Standby Gas Treatment start), and Group 7 Isolation (Reactor Coolant Sampling). Since emergency power was available, the Diesel Generator did not load. All equipment was verified to have actuated as required. The isolations were reset and all equipment returned to normal operation by 11:16 am.

B. Plant Status

The plant was in a refueling outage with Reactor coolant temperature at 150 degrees F.

C. Basis for Report

Unplanned actuations of Engineered Safety Features (ESF), reportable in accordance with 10CFR50.73(a)(2)(iv).

D. Cause

Human Miscue - When performing the test, the licensed operator inadvertently overlooked the step which would have defeated the undervoltage trip of Breaker 1FA. A contributing cause of this event was the use of a normal Surveillance Procedure with a significant number of steps marked "N/A". The Surveillance Procedure is written to test all undervoltage relays associated with the emergency busses. The procedure used in this event had a number of steps marked "N/A", since only limited portions of the procedure were used. The steps which defeated the undervoltage circuitry for testing were separated from the relay testing steps by several pages. Thus, it was not readily evident that the step had been overlooked.

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 (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	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 1	— 0 2 1	— 0 0	0 3	OF	0 3

TEXT (if more space is required, use additional NRC Form 306A's) (17)

E. Safety Significance

Other than isolation of the Secondary Containment and startup of the Standby Gas Treatment system and Diesel Generator, plant operation was not significantly affected. All systems actuated as designed. There was no significant increase in Reactor coolant temperature while Shutdown Cooling was isolated.

F. Safety Implications

Similar ESF actuations during normal power operation would not result in a significant effect on Reactor operation, since the plant is designed to continue to operate normally should the isolations occur. Procedures are in place to provide the appropriate actions to recover shutdown cooling should the isolations occur while shutdown.

In the event of a Group 6 Isolation during hot weather with the plant at full power, immediate operator action to restore normal ventilation is required in order to avoid a plant trip or forced shutdown. Upon Reactor Building Isolation, ventilation to the Reactor Recirculation Pump Motor Generator (RRMG) Sets is lost. If ventilation is not restored within a short timeframe, the probability is high that the RRMG Sets will trip due to high winding temperatures, resulting in loss of the Reactor Recirculation (RR) Pumps. In accordance with Abnormal Operating Procedure 2.4.2.2.1, upon loss of the RR Pumps with power greater than 1 percent, the Reactor would be manually scrammed.

G. Corrective Action

The personnel involved in this event will be counselled. This event will be covered in Industry Events training.

H. Similar Events

- LER 87-011 Unplanned Actuation of RPS and Containment Isolation Valve Groups 2, 3, and 6 Initiated During and Subsequent to Turbine Testing Due to Operator Error
- LER 87-012 Unplanned Actuation of Group 1 Isolation Valves During Surveillance Testing Due to Operator Error
- LER 88-017 Unplanned Automatic Actuation of Engineered Safety Features Due to Human Error During Surveillance Testing
- LER 88-018 Inadvertent Injection of Water into Reactor Vessel During Surveillance Test

None of these events were associated with the limited performance of a surveillance procedure.