



Nebraska Public Power District

COOPER NUCLEAR STATION
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TELEPHONE (402) 825-3811

CNSS903652

April 25, 1990

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 90-003, Revision 0, is being forwarded as an attachment to this letter.

Sincerely,

G. E. Horn
Division Manager of
Nuclear Operations
Cooper Nuclear Station

GRH:bjs

Attachment

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

9005020136 900427
PDR ADOCK 05000298
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LICENSEE EVENT REPORT (LER)

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 (P-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 1 OF 0 3

TITLE (4) Safety/Relief Valve and Safety Valve Setpoint Variance
Not Within Technical Specification Limits

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	3	2	8	9	0	9	0	0	0	0	3
0	3	2	8	9	0	9	0	0	0	0	3

OPERATING MODE (9) N

POWER LEVEL (10) 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)

20.402(b)	20.405(e)	50.73(a)(2)(iv)	73.71(b)
20.406(a)(1)(i)	50.35(e)(1)	50.73(a)(2)(v)	73.71(e)
20.406(a)(1)(ii)	50.36(a)(2)	50.73(a)(2)(vii)	X OTHER (Specify in Abstract below and in Text, NRC Form 366A)
20.406(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Donald L. Reeves

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
X	S B	R V	T O 2 0	Y					
X	S B	R V	D 2 4 3	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

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

While the plant was shutdown for the 1990 Refueling Outage, testing of Safety/Relief Valves (S/RV) and Safety Valves (SV) was conducted at Wyle Laboratories, Huntsville, Alabama. The as-found setpoints for four of the six S/RVs tested were not within the Technical Specification limit of ± 1 percent (11 psi). Additionally, the setpoints for the two Safety Valves (SV) tested were not within the Technical Specification limit of ± 1 percent (13 psi). This is a voluntary report in accordance with 10CFR 50.73 guidelines.

No specific root cause for the setpoint discrepancies was identified either during testing or during subsequent disassembly and inspection efforts. With regard to the S/RVs, it should be noted that the performance observed during testing is generally consistent with industry experience. To date, the root cause and corrective action for this industry-wide problem remains unresolved.

The valves were inspected, refurbished and satisfactorily retested at Wyle Laboratories before their return to the site. On January 26, 1990, a Technical Specification change request, increasing the setpoint tolerance to ± 3 percent, was submitted to the NRC. The proposed change was identified as corrective action in LER 89-015. Until such time as the S/RV setpoint deficiency being experienced and evaluated industry-wide is resolved, no further corrective action is planned.

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 (P-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 0	— 0 0 3	— 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 366A's) (17)

A. Event Description:

Testing of Safety/Relief Valves (S/RV) and Safety Valves (SV) conducted at Wyle Laboratories, Huntsville, Alabama, revealed the following as-found data.

Valve Type	Valve Serial No.	Limiting Safety System Setting	As-Found Setpoint	Variance
S/RV	382	1100 ± 11 psig	1152 psig	+ 4.7 percent
S/RV	383	1090 ± 11 psig	1119 psig	+ 2.7 percent
S/RV	387	1080 ± 11 psig	1096 psig	+ 1.5 percent
S/RV	381	1080 ± 11 psig	1065 psig	- 1.4 percent
SV	BL2461	1240 ± 13 psig	1202 psig	- 3.0 percent
SV	BL2462	1240 ± 13 psig	1203 psig	- 3.0 percent

Two additional S/RVs were also tested, one of which was a spare valve. The as-found setpoint data for each was satisfactory.

B. Plant Status

Shutdown for the 1990 Refueling Outage which commenced March 3, 1990.

C. Basis for Report

A voluntary report, submitted in the interest of ensuring that NRC is advised of S/RV and SV test results.

D. Cause

Subsequent to testing, the valves were disassembled and inspected. While no specific information was provided by the valve manufacturers or test lab personnel as to the root cause of these deficiencies, both Target Rock and Dresser Industries, the manufacturers of the S/RVs and SVs respectively, indicated that the performance observed during testing is generally consistent with industry experience.

E. Safety Significance

None. On January 26, 1990, NPPD submitted a request for a Technical Specification change to increase the S/RV and SV setpoint tolerance to ± 3 percent in lieu of the currently specified ± 1 percent. As justified in the change request, the setpoint for all of the S/RVs could drift as high as 1210 psig (+ 10 percent of setpoint of the highest set valves) without any significant effect on plant safety. Therefore, the safety evaluation performed to support the Technical Specification change request envelopes the conditions found during the 1990 S/RV testing which was conducted at Wyle Laboratories. General Electric has reconfirmed this assessment based upon the specific as-found data.

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-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)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Cooper Nuclear Station

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

F. Safety Implications

None. Prior analyses demonstrate that plant operation would have been within the design basis for all analyzed transients and accidents.

G. Corrective Action

The S/RVs and SVs were inspected, refurbished, and satisfactorily retested at Wyle Laboratories. It should be noted that with respect to the S/RVs, their performance was evaluated and considered to be consistent with industry experience. As specified in LER 89-015, a Technical Specification change request, increasing the setpoint tolerance from ± 1 percent to ± 3 percent, was transmitted to NRC on January 26, 1990.

H. Similar Events

- LER 89-015 - Safety/Relief Valve Setpoint Variance Not Within Technical Specification Limits
- LER 88-009 - Setpoint Variance and Operability Concerns Associated with Safety Relief Valves and Safety Valves Discovered During Surveillance Testing
- LER 86-032 - Main Steam Safety Relief Valve Setpoint Drift and Stuck Pilot Valve Inoperability Discovered During Scheduled Valve Testing and Refurbishment
- LER 85-003 - Setpoint Drift of Safety and Safety Relief Valves