



Nebraska Public Power District

COOPER NUCLEAR STATION
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NLS970034

February 18, 1997

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: Licensee Event Report No. 97-001
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

The subject Licensee Event Report is forwarded as an enclosure to this letter.

Sincerely,

M. F. Peckham
Plant Manager

/crm

Enclosure

cc: Regional Administrator
USNRC - Region IV

Senior Project Manager
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector
USNRC

NPG Distribution

INPO Records Center

W. Turnbull
MidAmerica Energy

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PDR ADOCK 05000298
S PDR

LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION
COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO
THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING
BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33),
U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, 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)

05000298

PAGE (3)

1 OF 3

TITLE (4)

Six Containment Penetrations Susceptible to Thermally Induced Overpressurization

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 NAME	DOCKET NUMBER
01	30	97	97	-- 001	-- 00	02	18	97	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)							
POWER LEVEL (10)		100	20.2201(b)		20.2203(a)(2)(v)		50.73(a)(2)(i)		50.73(a)(2)(viii)	
			20.2203(a)(1)		20.2203(a)(3)(i)		X 50.73(a)(2)(ii)		50.73(a)(2)(x)	
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71	
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER	
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A	
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)			

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Chris R. Moeller, Senior Staff Licensing Engineer	(402) 825-3811

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).	X NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

While performing engineering evaluations in response to NRC Generic Letter 96-06, it was determined that six containment penetrations are susceptible to thermally induced overpressurization during certain design basis accidents. At 1340 hours on January 30, 1997, it was determined that this situation was reportable as a condition outside design basis.

The apparent cause for this condition is the failure to recognize and address the potential failure modes described in Generic Letter 96-06 during original plant design and construction (NUREG 1022, Appendix B, Cause Code B). An evaluation of the structural integrity of the bounding configuration demonstrates that continued operability is assured for all six penetrations. Evaluation of the six affected penetrations to quantify the impact and required corrective actions is continuing. Corrective actions planned or taken to resolve this issue will be communicated to the NRC in follow up response to Generic Letter 96-06.

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		97	-- 001	-- 00	

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

PLANT STATUS

At the time of discovery, the plant was at full power operation.

EVENT DESCRIPTION

In response to Generic Letter 96-06, a review of all containment penetrations was performed to identify those piping segments that are normally isolated or that isolate in response to a valid loss-of-coolant accident (LOCA) signal. Only those completely filled with water were considered as the compressibility of either gas or steam will naturally limit the potential pressure increase to acceptable limits. The following penetrations were identified as a result of this review:

Penetration No. (1)	Size	Description
X8	3"	Main Steam Drainline
X12	20"	Residual Heat Removal Shutdown Cooling Suction
X14	6"	Reactor Water Clean-Up Suction
X18	3"	Drywell Equipment Sump Discharge
X19	3"	Drywell Floor Sump Discharge
X20	4"	Demineralized Water Header Supply (2)
X41	3/4" - 1"	Reactor Recirculation Sample Line

- Notes:
- (1) A complete loss of plant instrument air was assumed in developing this listing due to the fact that the station air compressors are non-essential and will be de-energized following a LOOP.
 - (2) Manually isolated whenever containment integrity is required.

Of these penetrations, six were subsequently determined to be susceptible to the affects of thermally induced overpressurization (specifically X8, X12, X14, X18, X19, and X20).

CAUSE

The apparent cause for this condition is the failure to recognize and address the potential failure modes described in Generic Letter 96-06 during original plant design and construction.

The cause classification for this condition is Design, Manufacturing, Construction/Installation (NUREG 1022, Appendix B, Cause Code B).

SAFETY SIGNIFICANCE

An evaluation of the structural integrity of the bounding configuration demonstrates that, while minor yielding will occur (on the order of 4% or less), continued operability is assured for all six penetrations. Therefore, while these penetrations are susceptible to overpressurization, the safety-significant concerns described in Generic Letter 96-06 will not occur.

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TEXT CONTINUATION

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		97	-- 001	-- 00	

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

CORRECTIVE ACTIONS

Evaluation of the six affected penetrations to quantify the impact and required corrective actions is continuing. Corrective actions planned or taken to resolve this issue will be communicated to the NRC in follow up response to Generic Letter 96-06.

PREVIOUS EVENTS

None.

