



Nebraska Public Power District

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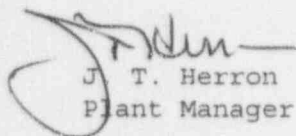
November 13, 1995

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 95-014 is forwarded as an attachment to this letter.

Sincerely,


J. T. Herron
Plant Manager

/nr

Attachment

cc: L. J. Callan
G. R. Horn
J. H. Mueller
R. G. Jones
R. A. Sessoms
K. C. Walden
N. E. Champlin
INPO Records Center
NRC Resident Inspector
W. Turnbull
CNS Training
CNS Quality Assurance

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PDR ADDCK 05000298
S PDR

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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 4

TITLE (4)

Procedural error that could result in compromising Secondary Containment Integrity during accident conditions.

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
10	12	95	95	-- 014	-- 00	11	13	95	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)		085	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)		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)		X 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

William R. Victor, Licensing and Compliance Specialist

TELEPHONE NUMBER (Include Area Code)

(402) 825-3811

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

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)

On October 12, 1995, a potential for compromising Secondary Containment Integrity during accident conditions when aligning Train A of the Standby Nitrogen Injection (SBNI) System was identified. SBNI is a redundant train, manually aligned system that was installed in compliance with the requirements of 10CFR50.44, "Combustible Gas Control" to ensure that an inert post-accident Primary Containment atmosphere would be maintained. The SBNI Operating Procedure requires an operator to breach Reactor Building Door R115 with a flexible hose in order to connect Train A of the SBNI system (located inside the vestibule) to the nitrogen supply (located outside the Reactor Building). In June 1993, a surveillance procedure was revised to stop maintaining and testing the inner door (R109) as a Secondary Containment boundary. Only the outer door (R115) has been maintained and tested as a part of Secondary Containment. Placing train A of SBNI in service requires breaching Door R115. Therefore, Secondary Containment Integrity was not assured during accident conditions in which Train A of SBNI could have been required if the alignment had been performed as written, since the single qualified Secondary Containment boundary would be breached.

The cause of this condition is personnel error [NUREG-1022 CAUSE CODE A] both in the initiation of the procedural change to discontinue maintenance of the inner door as a Secondary Containment boundary and in the review afforded that procedure change. The corrective actions are to restore the Secondary Containment boundary at the inner door, to validate the remainder of the licensing basis SBNI assumptions, to verify that other Secondary Containment boundaries do not have the potential to be similarly compromised, and to address the personnel issues that contributed to this condition.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL	REVISION	
COOPER NUCLEAR STATION	05000298	95	-- 014	-- 00	2 OF 4

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

PLANT STATUS

The plant was at 85 percent power coasting down to a refueling outage (RE16) at the time of discovery.

EVENT DESCRIPTION

On October 12, 1995, a potential for compromising Secondary Containment [EIIS: NG] Integrity during accident conditions when aligning Train A of the Standby Nitrogen Injection (SBNI) System [BB] was identified. This was communicated to the NRC at 1905 on 10/12/95 via a 4-hour ENS notification.

SBNI was designed and constructed to meet the post-TMI requirements of 10CFR50.44, "Combustible Gas Control." In the NRC's Safety Evaluation Report of 11/19/92, SBNI is described as consisting of two independent and redundant nitrogen paths (Trains A and B) into the Primary Containment [NH] that can be activated within 10 hours post-accident. SBNI is also described as a manually activated system and that the operator actions for setup of the system all take place outside Secondary Containment in order to minimize any radiation or thermal exposure received during any operator action. The SBNI Train A distribution piping supply connection is located in the vestibule of the former Reactor Building south airlock [AL] ¹. SBNI Operating Procedure 2.2.92 requires the opening of outer door R115 [DR] and breaching it with a flexible hose in order to connect the nitrogen supply (located outside the Reactor Building) to the distribution header. On June 17, 1993, Revision 4 to Procedure 6.3.10.17 was approved which eliminated inner door R109 from the Secondary Containment penetration examination schedule. This effectively shifted the Secondary Containment boundary to only outer door R115. As a result, the operator would have to breach Secondary Containment while placing Train A of SBNI into operation. This procedure change also compromised the above assumption regarding manual initiation taking place outside Secondary Containment, which was credited by the NRC in its approval of the SBNI design.

SAFETY SIGNIFICANCE

SBNI exists as a nonsafety-related emergency backup to the primary Nitrogen Inerting System [LK]. During normal operations, the primary containment is maintained inerted with Nitrogen and sources of oxygen introduction into containment are controlled. During the design basis Loss of Coolant Accident, the inerted Primary Containment atmosphere is capable of preventing combustible hydrogen-oxygen recombinations in the Primary Containment given the realistic hydrogen and oxygen generation rates.

1. A separate design change was completed in 1989 which eliminated the airlock as a point of entrance by barricading outer door R115 with a steel plate (which is dismantled when aligning SBNI Train A). Inner door R109 was still maintained and inspected as a Secondary Containment boundary at that time by Procedure 6.3.10.17, "Secondary Containment Penetration Examination."

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL	REVISION	
COOPER NUCLEAR STATION	05000298	95	-- 014	-- 00	3 OF 4

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

The licensing basis combustible gas generation rates associated with Regulatory Guide 1.7 are very conservative. The post-accident combustible gas generation postulated by Regulatory Guide 1.7 is unlikely to occur except under severe accident conditions which reduces further the likelihood of needing to operate the SBNI system. Additionally, since Door R115 is sealed closed, Train A would not be the preferred SBNI distribution path.

Due to the conservative plant conditions where SBNI is credited, the control of sources of oxygen into primary containment, the maintenance of an inerted containment atmosphere, and the multiple sources of nitrogen makeup, there is a low probability of achieving a set of circumstances where Train A of SBNI would need to be used. Therefore, the safety significance of this condition is minimal.

CAUSE

The cause of this condition is personnel error. The barriers that were in place in 1993 to prevent this type of condition included: a) required 10CFR50.59 screening of procedure change notices (PCNs), b) supervisory review of PCNs, and c) PCN review and approval by the Station Operations Review Committee (SORC).

An inadequate 10CFR50.59 screen was performed for the PCN for Procedure 6.3.10.17, since the SBNI SER was not included within the scope of the screen. The PCN initiator, his supervisor, and SORC did not recognize that an SBNI SER assumption had been compromised because the SER was not reviewed during the PCN process. More fundamentally, because the outer door was sealed closed, there was a predisposition to assume that access would never be needed through the door. For this reason, the question of whether there was a post-accident access requirement through Door R115 was neither brought up nor pursued during the review and approval process.

The multiple personnel errors associated with this condition reflect the absence of critical review and a questioning attitude during this PCN process.

CORRECTIVE ACTION

A visual inspection was performed of Door R109, where some signs of degradation were observed on the seal. A leakage test was performed on the as-found seal which indicated that the additional Secondary Containment in-leakage would still be within the capability of the Standby Gas Treatment System [BH] to achieve the required 0.25" w.g. vacuum in the Reactor Building. Although the door had not been controlled to ensure it remained in the closed position and the seal had not been maintained, this test provides some confidence that Secondary Containment Integrity could nevertheless have been maintained during Train A SBNI hookup.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
COOPER NUCLEAR STATION	05000298	YEAR	SEQUENTIAL	REVISION	4 OF 4
		95	-- 014 --	00	

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

The following additional corrective actions have been taken to address the nonconforming condition:

- An Order was issued by Plant Management to inform the Operations staff of this condition and to restrict the use of SBNI Train A during power operations when Secondary Containment Integrity is required.
- The CNS procedures were reviewed to determine when other Secondary Containment boundary doors are allowed to be breached. This review found no other cases when Secondary Containment Integrity is compromised when it is required.

Previous correspondence to the NRC has addressed the sweeping changes made during the 1994 forced outage to correct the CNS cultural issues that contributed to this condition. These changes have resulted in a more effective SORC, and a more self-critical and questioning attitude by plant personnel.

The SBNI SER was reviewed to validate that the remaining licensing basis assumptions are properly reflected in the as-built configuration of the system and in controlled CNS documents. No other discrepancies were found.

Prior to restart from RE16, SBNI Train A will be restored to its licensing basis requirement of being capable of manual alignment outside of the Secondary Containment by reinstating the inner door as a Secondary Containment boundary.

SIMILAR EVENTS

- LER 93-011 Secondary Containment Surveillance Methodology Failed to Identify Path Between Secondary Containment and the Radwaste Building.
- LER 95-013 Plant Procedural Requirements Inconsistent with Station Blackout Assumptions.

Correspondence No: NLS950214

The following table identifies those actions committed to by the District in this document. Any other actions discussed in the submittal represent intended or planned actions by the District. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
SBNI Train A will be restored to its licensing basis requirement of being capable of manual alignment outside of the Secondary Containment by reinstating the inner door as a Secondary Containment boundary.	Prior to Startup from RE16