

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 03
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TITLE (4)
Defueling Operations Without Secondary Containment Integrity

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)																																		
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (9) N</td> <td colspan="10">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="5">POWER LEVEL (10) 0 0 0</td> <td>20.402(b)</td> <td>20.406(c)</td> <td>50.73(a)(2)(iv)</td> <td>73.71(b)</td> </tr> <tr> <td>20.406(a)(1)(i)</td> <td>50.36(c)(1)</td> <td>50.73(a)(2)(v)</td> <td>73.71(c)</td> </tr> <tr> <td>20.406(a)(1)(ii)</td> <td>50.36(c)(2)</td> <td>50.73(a)(2)(vii)</td> <td rowspan="3">OTHER (Specify in Abstract below and in Text, NRC Form 386A)</td> </tr> <tr> <td>20.406(a)(1)(iii)</td> <td>X 50.73(a)(2)(i)</td> <td>50.73(a)(2)(viii)(A)</td> </tr> <tr> <td>20.406(a)(1)(iv)</td> <td>50.73(a)(2)(ii)</td> <td>50.73(a)(2)(viii)(B)</td> </tr> <tr> <td>20.406(a)(1)(v)</td> <td>50.73(a)(2)(iii)</td> <td>50.73(a)(2)(ix)</td> <td></td> </tr> </table>												OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)										POWER LEVEL (10) 0 0 0	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)	20.406(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)	20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)	20.406(a)(1)(iii)	X 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)	
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LICENSEE CONTACT FOR THIS LER (12)

NAME E. M. Mace, Plant Engineering Supervisor	TELEPHONE NUMBER AREA CODE: 410 2 825 1-3 18 111
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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) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

During plant shutdown conditions, a Secondary Containment Leak Test was performed to verify secondary containment integrity prior to defueling operations. This test is required by Cooper Nuclear Station Technical Specifications, paragraph 4.7.C.1.c. After completion of what was considered to be a satisfactory Secondary Containment Leak Test, the reactor core was completely defueled.

After defueling operations had been completed, it was discovered that plant conditions had existed during the Secondary Containment Leak Test which invalidated the results. Therefore, fuel handling operations had been conducted without verification of secondary containment integrity, which is a violation of Cooper Nuclear Station Technical Specifications. This violation was caused by a combination of procedural and personnel errors, with no generic implications.

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

On September 18, 1984, during plant shutdown conditions, Surveillance Procedure 6.3.10.8, Secondary Containment Leak Test, was conducted. This test is required by CNS Technical Specification 4.7.C.1.c. in order to verify secondary containment integrity prior to fuel handling operations. This test failed because the required 1/4 inch of water vacuum could not be attained in secondary containment. The failure of the test was attributed to a Reactor Recirculation Motor Generator (RRMG) set ventilation exhaust valve which had been dismantled for maintenance, thus providing a secondary containment leakage path during the test. On September 20, 1984, following repair work on the RRMG set ventilation exhaust valve, a second Secondary Containment Leak Test was performed with satisfactory results. On September 22, 1984, fuel handling operations were commenced and core defueling was completed on September 29, 1984.

Due to the failure of the first Secondary Containment Leak Test, a Nonconformance Report was issued to document the failure and its cause, as described above. On November 30, 1984, the CNS Quality Assurance Department completed its review of the nonconformance report and identified documentation which showed that the original evaluation was invalid (i.e., the 48 inch RRMG set ventilation exhaust valve had not been dismantled during the test). Accordingly, another investigation was initiated to determine the cause of the failure of the first test.

The resulting investigation included a review of the plant conditions which had changed between the first test and the second test. After extensive research, which included discussions with the operators involved, analysis of several Control Room recorder charts, a review of maintenance work which may have been in progress, and a review of pertinent operating logs, it was determined that (1) the mechanical vacuum pumps had assisted the SBGTS during the successful test and (2) one of the redundant SBGTS discharge lines may have been flooded with water which could have affected both tests. After an independent verification of this data, the Station Operations Review Committee convened on January 16, 1985 and determined that fuel handling operations had been conducted without verification of secondary containment integrity and that the event was reportable.

With the plant still in shutdown conditions, on February 12, 1985, after the redundant SBGTS discharge line had been drained and the secondary containment had been returned to the same configuration that existed on September 20, 1984, a satisfactory Secondary Containment Leak Test was performed. Based upon the results of this test, it is suspected that the actual cause of the failure of the first Secondary Containment Leak Test was the flooded SBGTS discharge line.

Procedural and personnel errors identified which contributed to this event are:

1. Surveillance Procedure 6.3.10.8 did not specify the exact plant conditions necessary to ensure that a valid Secondary Containment Leak Test was performed.
2. Surveillance Procedure 6.4.8.7, "Offgas Loop Seal Blowdown and Fill", was in error, which could have allowed a water obstruction to be created in one of the redundant SBGTS discharge lines.

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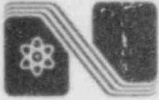
TEXT (If more space is required, use additional NRC Form 366A's) (17)

3. The Control Room Operators on duty at the time of the second Secondary Containment Leak Test failed to recognize that existing plant conditions would not permit a valid test of secondary containment integrity.

Corrective actions taken to preclude recurrence of this event are:

1. Surveillance Procedure 6.3.10.8 is being revised to specify the required plant conditions necessary to conduct a valid secondary containment integrity test.
2. Surveillance Procedure 6.4.8.7 will be changed to preclude creating a water obstruction in the SBGTS discharge line.
3. Training will be conducted for licensed operators on the interrelationship between various systems and plant conditions that affect the validity of testing conducted to verify secondary containment integrity.

This event had no effect on the public health and safety and has no generic implications.



Nebraska Public Power District

COOPER NUCLEAR STATION
P.O. BOX 98, BROWNVILLE, NEBRASKA 68321
TELEPHONE (402) 825-3811

CNSS850069

February 14, 1985

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 85-001 is forwarded as an attachment to this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read "P. V. Thomason".

for P. V. Thomason
Division Manager of
Nuclear Operations

PVT:lb
Attach.

cc: R. D. Martin
L. G. Kunc1
J. D. Weaver
L. R. Berry
INPO Records Center
ANI Library

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