NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Cooper Nuclear Station	0 5 0 0 0 2 9 8	1 OF 0 3

TITLE (4)

High Pressure Coolant Injection System Low Suction Pressure Turbine Trip

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 5 0 0 0
0 8	2 3	8 5	8 5	— 0 0 7	— 0 0	0 9	2 0	8 5		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
0 0 7		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Robert Brungardt, Acting Operations Manager	4 0 2 8 7 5 - 3 8 1 1

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)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

While performing the daily operation of the High Pressure Coolant Injection (HPCI) System auxiliary oil pump, shortly after startup from an extended outage, the HPCI steam supply stop valve did not open as required. Investigation revealed that the HPCI pump low suction pressure turbine trip was in effect which prevented the HPCI stop valve from opening.

Immediate corrective action was taken in the form of testing and calibration of the HPCI pump low suction pressure switch. During this phase of the investigation, the low suction pressure switch isolation valve was found to be closed. After returning the valve to its normally open position, the HPCI pump low suction pressure turbine trip cleared and the HPCI stop valve operated properly. This event is considered to be attributable to procedural and personnel error, compounded by changing environmental conditions which affected actuation of the isolated pressure switch. It is believed that this event has no generic implications.

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

As required by Cooper Nuclear Station procedures, the HPCI auxiliary oil pump is operated on a daily basis. Operation of the HPCI auxiliary oil pump causes the HPCI hydraulically operated steam stop and governor valves to open. During startup testing on August 23, 1985, with reactor power at 7% and pressure at 500 psig, an on duty Licensed Operator started the HPCI auxiliary oil pump. The operator observed that the HPCI stop valve failed to open and that the HPCI high/low pump suction pressure alarm was in. It was then verified that a HPCI low pump suction pressure turbine trip was in effect which prevented the HPCI stop valve from opening.

Immediate corrective action taken was issuance of an emergency Maintenance Work Request and the performance of Surveillance Procedure 6.2.2.3.6, HPCI Pump Low Suction Pressure Calibration and Functional/Functional Test. Additionally, the HPCI system was declared inoperable. As the surveillance procedure was being conducted, it was discovered that the pressure switch isolation valve was in the closed position. The improper valve position was immediately corrected and the HPCI high/low pump suction pressure alarm and HPCI pump low suction pressure turbine trip both cleared. The HPCI auxiliary oil pump was operated and the HPCI stop and governor valves opened as required. The HPCI system was then returned to an operable status. The calibration and testing of the pressure switch was then completed per the issued Surveillance Procedure. The pressure switch did not require calibration and operated properly as outlined in the Surveillance Procedure. The pressure switch actuation is set at 12-13" HG increasing.

This event is considered to be attributable to a combination of:

1. Personnel errors in that the isolation valve for the HPCI pump low suction pressure switch was in the closed position and a vacuum left on the pressure switch. It is believed that the isolation valve was closed and a vacuum left on the pressure switch after previous calibration/testing of the pressure switch per Surveillance Procedure 6.2.2.3.6.

2. Procedural deficiency in Surveillance Procedure 6.2.2.3.6. The procedure lacks specific information about the correct valve positioning required and how to properly remove the created vacuum following the calibration/testing of the pressure switch.

3. Certain changing environmental conditions which existed at the time near the physical location of the pressure switch. Room temperature at the physical location of the pressure switch increased due to plant startup and then subsequently decreased as startup problems were encountered and reactor pressure was lowered. It is believed that due to lowering room temperature the isolated pressure switch was actuated by an increasing vacuum without a true HPCI pump low suction pressure condition present.

Corrective actions to preclude recurrence of this event are:

1. Surveillance Procedure 6.2.2.3.6 will be changed to identify (a) specific valves required to be operated, (b) the valve positioning required for the calibration/testing, (c) the valve positioning required to place the pressure switch back into service, and (d) the proper method to relieve the vacuum created per the surveillance.

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

2. Discussion of this event with I&C personnel emphasizing that surveillances are to be followed so as to properly test or calibrate a component and return it back into service.

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

Nebraska Public Power District

COOPER NUCLEAR STATION
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TELEPHONE (402) 825-3811

CNSS850548

September 20, 1985

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 85-007 is forwarded as an attachment to this letter.

Sincerely,

P. V. Thomason
Division Manager of
Nuclear Operations

PVT:lb
Attach.
cc: R. D. Martin
L. G. Kuncl
J. D. Weaver
L. R. Berry
INPO Records Center
ANI Library

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