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)
D. C. Cook Nuclear Plant, Unit 1	0 5 0 0 0 3 1 5	1 OF 0 3

TITLE (4) Lack of Specificity in Technical Specification Requirements Resulted In Operation With Unanalyzed Emergency Core Cooling System Configuration (Residual Heat Removal)

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 9	2 5	8 6	8 6	0 2 1	0 0	1 0	2 4	8 6	D. C. Cook, Unit 2	0 5 0 0 0 3 1 6
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 9 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		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)	X 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
K. R. Baker, Operations Superintendent	6 1 6 4 6 5 - 5 9 0 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
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 3	3 1	8 7

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

On September 25, 1986, a determination was made that during surveillance testing, the Residual Heat Removal System may have been in an unanalyzed flow path configuration in respect to the Loss of Coolant Accident Analysis found in the plant Final Safety Analysis Report. This determination was made as a result of an investigation prompted by Licensee Event Report 316-86-026 concerning Emergency Core Cooling System cross-tie valve requirements.

Lack of specificity regarding low head Safety Injection system cross-tie capability in the Technical Specification requirements was the cause of this event.

Administrative Controls have been placed on the cross-tie valves and other identified Emergency Core Cooling System valves on both Units to prevent isolation.

We are presently researching the requirements of the Residual Heat Removal System, a supplemental report containing the results of this analysis will be submitted by March 31, 1987. However, since no situations have occurred where Residual Heat Removal capability has been insufficient (as a result of system operation with the unanalyzed flow path) it has been concluded that this event had no adverse effect on the health and safety of the public.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
D. C. Cook Nuclear Plant, Unit 1	0 5 0 0 0 3 1 5	8 6	— 0 2 1	— 0 0	0 2 OF 0 3

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

Conditions Prior to Occurrence

Unit 1 - Mode 1 (Power Operation) - 90 percent reactor thermal power.
Unit 2 - Mode 1 (Power Operation) - 80 percent reactor thermal power.

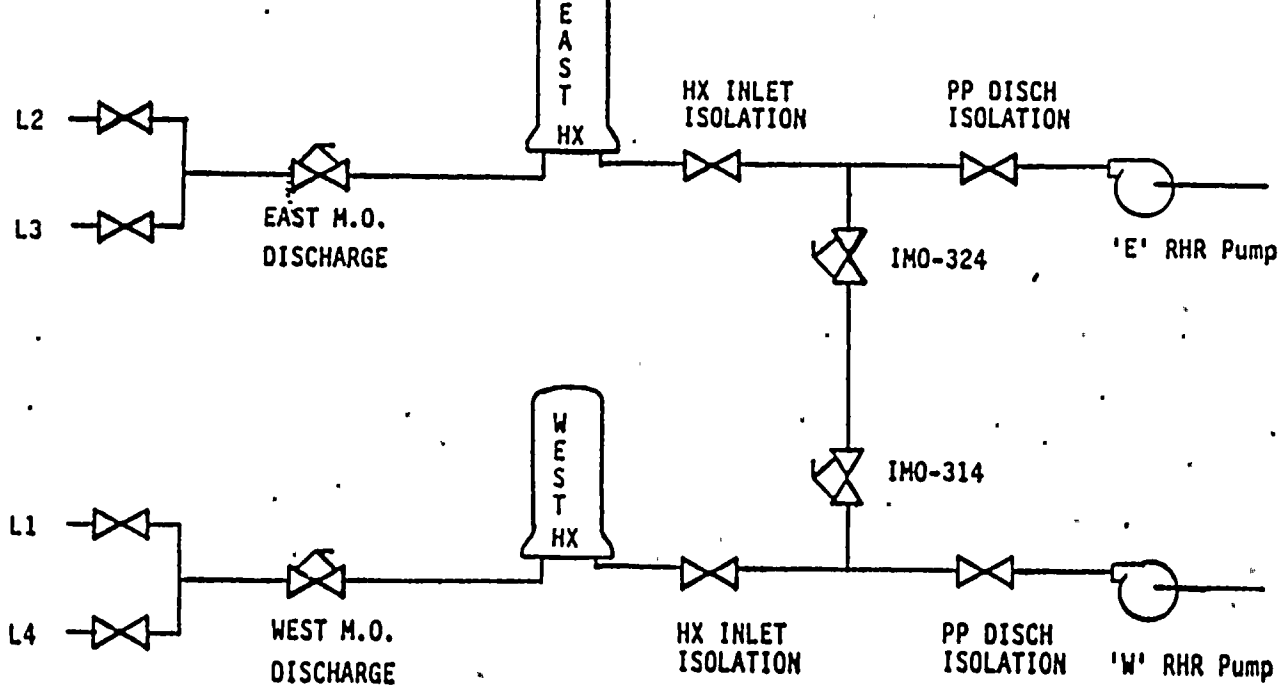
Description of Event

On September 25, 1986, a determination was made that during surveillance testing, the Residual Heat Removal System (RHRS) (EIIS-BP) may have been in an unanalyzed flow path configuration in respect to the Loss of Coolant Accident (LOCA) Analysis found in the plant Final Safety Analysis Report (FSAR). This determination was made as a result of an investigation prompted by Licensee Event Report 316-86-026 concerning Emergency Core Cooling System (ECCS) cross-tie valve (EIIS-MOV) requirements.

In the plant FSAR the Large Break LOCA Analysis requires that RHRS injection be available to all four Reactor Coolant System (EIIS-AB) cold legs.

In the event of a single RHRS pump (EIIS-BPP) failure (assumed) these flow paths are assured by maintaining the motor-operated valves (IMO-314, IMO-324) in the cross-tie between two pumps in the open position. It has been determined by this investigation that past surveillance and maintenance valve configurations have resulted in injection paths available to only two of the four cold legs.

There were no inoperative structures, components or systems that contributed to this event.



Cause of the Event

The cause of this event is the result of lack of specificity in the Technical Specification requirements regarding an operable low head Safety Injection flow path in that the Limiting Condition for Operation does not recognize cross-tie capability. Therefore the interpretation in the past was that an operable low head Safety Injection train did not require that the cross-tie valves be open. As a result of this silence in Technical Specifications, closing the cross-tie valves for either preventive maintenance or surveillance testing was not perceived to be a problem.

Analysis of Event

This event is considered reportable under the criteria set forth in 10 CFR 50.73(a)(2)(ii).

We are presently researching the requirements of the Residual Heat Removal System, a supplemental report containing the results of this analysis will be submitted by March 31, 1987. However, since no situations have occurred where Residual Heat Removal capability has been insufficient (as a result of system operation with the unanalyzed flow path) it has been concluded that this event had no adverse effect on the health and safety of the public.

Corrective Actions

Administrative Controls have been placed on the cross-tie valves and other identified ECCS valves on both Units to prevent isolation. In addition, operational and Technical Specification direction has been sought to ensure compliance with the surveillance requirements for this system.

Failed Components Identification

None

Previous Similar Events

316-86-026 - This Licensee Event Report is being submitted as a result of a review conducted following the investigation of LER 86-026.