

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-
8 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)

Millstone Nuclear Power Station Unit 3

DOCKET NUMBER (2)

05000423

PAGE (3)

1 of 2

TITLE (4)

Temporary I-Beams Located Overhead of Recirculation Spray System Heat Exchangers
Due to Inadequate Work Control

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
03	12	96	96	003	00	04	04	96	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		1	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)		<input checked="" type="checkbox"/>		50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)		20.2203(a)(3)(i)		<input checked="" type="checkbox"/>		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)	07:ER
			20.2203(a)(2)(iii)		50.36(c)(1)		<input checked="" type="checkbox"/>		50.73(a)(2)(v)	Spec. 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 J. Temple, Nuclear Licensing Supervisor

TELEPHONE NUMBER (include Area Code)

(860)437-5904

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		NO		EXPECTED SUBMISSION	MONTH	DAY	YEAR
<input checked="" type="checkbox"/>		<input type="checkbox"/>					
(If yes, complete EXPECTED SUBMISSION DATE).							

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

On March 12, 1996, at 1845 hours, with the plant in Mode 1 at 100-percent power, temporary I-beams were discovered in a location above the Recirculation Spray System (RSS) heat exchangers. The control room was immediately informed. On-call maintenance personnel were called in and the beams were removed by 2030 hours.

On March 13, 1996, an engineering review determined that the temporarily blocked I-beams previously located above the heat exchangers was a condition alone, that given a seismic event, could have resulted in the potential degradation or loss of one of two heat exchangers in each of two trains of the RSS system. The beams had been in place since a 1991 plant outage, when they were temporarily installed for rigging purposes. The condition could have resulted in the degradation or loss of safety function of the RSS system, and also potentially result in a breach of containment since the RSS suction valves are normally open to the containment sump. The event also potentially involved a condition that was outside the design basis of the plant, because a seismic event could have resulted in the plant having redundant trains incapable of performing their design function.

The cause of the condition was inadequate guidance given to plant workers on the use of temporary equipment. As corrective action, the beams were immediately removed. Inspections were performed in all safety related areas of the plant and no other temporary equipment conditions were found that could affect the operation of safety related systems. To prevent recurrence, the work control procedure will be revised to provide requirements on the storage and use of temporary equipment. Also, training will be provided to plant workers on the revised procedure.

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

I. Description of Event

On March 12, 1996, at 1845 hours, with the plant in Mode 1 at 100-percent power, temporary I-beams were discovered in a location above the Recirculation Spray System (RSS) heat exchangers. The control room was immediately informed. On-call maintenance personnel were called in and the beams were removed by 2030 hours.

On March 13, 1996, an engineering review determined that the temporary beams previously located above the heat exchangers was a condition alone, that given a seismic event, could have resulted in the loss of one of two heat exchangers in each of two trains of the RSS system. The condition could have resulted in the degradation or loss of the safety function of the RSS system, and also potentially result in a breach of containment because the RSS suction valves are normally open to the containment sump. The condition also involved a condition that was outside the design basis of the plant, because a seismic event could have resulted in the plant having multiple trains degraded to the point where they may not have fully performed their design basis function. As a result of this determination, an immediate notification was provided to the NRC on March 13, 1996.

A subsequent review determined that the beams had been in place since a 1991 plant outage, when they were temporarily installed for rigging purposes. There are two RSS heat exchangers in each of two trains of the RSS system. Heat exchangers A and C are in one train. Heat exchangers B and D are in the other train. The beams over the A and D exchangers were temporarily blocked in place. The beam over the C exchanger was clamped in place. It is postulated that a seismic event could dislodge the beams, and potentially affect at least one heat exchanger in each train. The impact was postulated on the RSS shell side, and not postulated to affect the Service Water tube side of the heat exchangers.

Subsequent inspections were performed in all safety related areas of the plant and no other temporary equipment or rigging conditions were found that could adversely affect the operation of safety related systems. Several additional house keeping conditions were identified and corrected, regarding the storage of temporary equipment.

II. Cause of Event

The cause of the condition was inadequate guidance given to plant workers on the use of temporary equipment in the 1991 time frame. A review of procedures and the plant Material Condition Control Program Manual indicated that there was no clear guidance to plant workers on the expectations for storage and removal of temporary equipment.

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

III. Analysis of Event

The temporary beams located above the RSS heat exchangers was a condition alone, that given a seismic event, could have resulted in the degradation or loss of one of two heat exchangers in each of two trains of the RSS system. The beams had been in place since a 1991 plant outage, when they were temporarily installed for rigging purposes. The condition could have resulted in the degradation or loss of safety function of the RSS system, and also potentially result in a breach of containment since the RSS suction valves are normally open to the containment sump. The condition also involved a condition that was outside the design basis of the plant, because a seismic event could have resulted in a condition where multiple trains could have been degraded to the point where they would be incapable of performing their design basis function.

IV. Corrective Action

As corrective action, the beams were immediately removed. Inspections were performed in all safety related areas of the plant to ensure no other temporary equipment or rigging posed a condition that could adversely affect the operation of safety related systems. Several additional house keeping conditions were identified and corrected, regarding the storage of temporary equipment.

The beams were installed in 1991. Since that time work practices and work control procedures have been improved. To prevent recurrence, the work control procedure will be further revised to provide requirements on the storage and use of temporary equipment. Also, training will be provided to plant workers on the revised procedure.

V. Additional Information

None.

Similar Events

None

Manufacturer DataEIIS System Codes

Residual Heat Removal - BP

EIIS Equipment Codes

Heat Exchanger - HX