

February 16, 2000

United States Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

Operating License DPR-58 Docket No. 50-315

**Document Control Manager:** 

In accordance with the criteria established by 10 CFR 50.73 entitled <u>Licensee Event Report System</u>, the following report is being submitted:

LER 316/2000-001-00, "THROUGH-LINER HOLE DISCOVERED IN CONTAINMENT LINER"

The following commitments were identified in this submittal:

Repairs to the containment liner will be completed prior to the restart of Unit 2.

If you have any questions, please contact Mr. Robert C. Godley, Director, Regulatory Affairs, at 616/465-5901, extension 2698.

Sincerely,

M. W. Rencheck

Vice President - Nuclear Engineering

/mbd

Attachment

C:

J. E. Dyer, Region III

R. C. Godley

D. Hahn

W. J. Kropp

R. P. Powers

R. Whale

Records Center, INPO

**NRC** Resident Inspector

IE22

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NRC FO (6-1998)	RM 36	366 U.S. NUCLEAR REGULATORY COMMISSION							APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001							
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FACILITY	NAME	(1)							DOC	(E)	r NUMBER (2)	PAGE (3)				
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MODE (9)			20.2201(b)			20.2203(a)(2)(v)			Ť	50.73(a)(2)(i)		50.73(a)(2)(viii)				
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			20.22						50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A						
			20.2203(a)(2)(iv)						50.73(a)(2)(vii)							
					LICENS	SEE CONT	ACTFO	OR THIS	LER	(12	2)					
Mary Beth Depuydt, Regulatory Compliance						TELEPHONE NUMBER (Include Area Code) (616) 465-5901 X 1589										

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

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X YES (If yes, complete EXPECTED SUBMISSION DATE).					NO		SUBM	<i>i</i> ission	05	16	2000	

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

In November 1999, during the Coatings Assessment and Inservice Program inspection of the Unit 2 containment liner, an indication was found that appeared to be a weld repair of the liner plate. Surface preparation to allow for further inspection dislodged repair material from what appears to be a previously repaired area, resulting in an approximately 3/16 inch circular through-liner hole. On January 17, 2000, at 1649 hours Eastern Standard Time (EST) an Emergency Notification System (ENS) report was made in accordance with 10 CFR 50.72(b)(2)(i), for a condition which was found while the reactor is shutdown, which would have resulted in the plant, including its principal safety barriers, being seriously degraded or being in an unanalyzed condition that significantly compromises plant safety. This LER is therefore submitted in accordance with 10 CFR 50.73(a)(2)(ii)(A).

The cause of the through-liner hole cannot be positively determined at this time. The damaged area is being removed for metallurgical analysis and to facilitate repair. Inspection of the Unit 2 containment liner has been completed and no similar indications were found. Future inspections per the Containment Inspection and the Safety Related Coatings Programs will ensure the integrity of the liner plate. Containment liner plate repair per the ASME Section XI Repair and Replacement Program, ensures that repairs on ISI Code class components meet the applicable code requirements.

The most recent 10CFR 50 Appendix J Integrated Leakage Rate Testing (ILRT) performed on the Unit 2 containment was conducted in May, 1992. The test results showed as found leakage to be well within the maximum allowable leak rate. Therefore, under test conditions, the discrepant area did not significantly affect the leak tightness of the containment. However, concerns existed that under the thermal stress of a postulated accident condition, the repair material could have dislodged. A supplement to this LER will be submitted upon completion of the root cause investigation.

NRC FORM 366A (6-1998)

**U.S. NUCLEAR REGULATORY COMMISSION** 

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)				PAGE (3)		
Cook Nuclear Plant Unit 2	05000-316	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	OF	2	
		2000	001	00				

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

# **Conditions Prior To Event**

Unit 2 was de-fueled

# **Description Of The Event**

In November 1999, during the Coatings Assessment and Inservice Program inspection of the Unit 2 containment liner, an area was found that was missing the required protective coating and rusting slightly. Due to the nature of the indication and the missing coating, it was decided to further investigate the indication to determine actual base metal condition. On January 17, 2000, surface preparation to allow for further inspection dislodged repair material from a previously repaired area on the liner plate resulting in an approximately 3/16 inch circular through-liner hole.

#### Cause Of The Event

The cause of the through-liner hole cannot be positively determined at this time. The exterior surface hole diameter is smaller than the interior hole diameter, with a smooth interior surface. Therefore, the damage does not appear to be a result of corrosion. The damaged area is being removed for metallurgical analysis to determine the cause of the damage. A search of Unit 2 containment construction records failed to identify a record of any liner plate through-wall repairs.

### **Analysis Of The Event**

On January 17, 2000, at 1649 hours EST an ENS report was made in accordance with 10 CFR 50.72(b)(2)(i), a condition which was found while the reactor is shutdown, which would have resulted in the plant, including its principal safety barriers, being seriously degraded or being in an unanalyzed condition that significantly compromises plant safety. This LER is therefore submitted in accordance with 10 CFR 50.73(a)(2)(ii)(A).

The most recent 10CFR 50 Appendix J Integrated Leakage Rate Testing (ILRT) performed on the Unit 2 containment was conducted in May, 1992. The test results showed as found leakage to be well within the maximum allowable leak rate. Therefore, under test conditions, the discrepant area did not affect the leak tightness of the containment. However, concerns existed that under the thermal stress of a postulated accident condition, the repair material could have dislodged.

#### **Corrective Actions**

The liner plate repair along with the necessary examinations, inspections, and testing will be performed in accordance with the ASME Section XI Repair / Replacement Plan. The Containment Inspections Program and the Safety Related Coatings Program will contribute to identification of conditions on the liner plate that are adverse to quality. Inspection of the Unit 2 containment liner coatings and exposed surfaces has been completed. No additional deficiencies challenging the barrier integrity were identified during this visual inspection. Repairs to the containment liner will be completed prior to the restart of Unit 2.

Repairs to the Containment liner plate are required to be performed in accordance with the ASME Section XI Repair and Replacement Program. This program ensures that repairs on ISI Code Class components will meet the applicable code requirements.

#### Similar Events

None