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10 CFR 50.73

SVPLTR # 07-0024

May 1, 2007

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Dresden Nuclear Power Station, Unit 3
Renewed Facility Operating License No. DPR-25
NRC Docket No. 50-249

Subject: Licensee Event Report 249/2007-001-00, "Unit 3 High Pressure Coolant Injection System Declared Inoperable"

Enclosed is Licensee Event Report 249/2007-001-00, "Unit 3 High Pressure Coolant Injection System Declared Inoperable," for Dresden Nuclear Power Station, Unit 3. This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident."

Should you have any questions concerning this report, please contact Mr. James Ellis, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,

Danny G. Bost
Site Vice President
Dresden Nuclear Power Station

Enclosure

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Dresden Nuclear Power Station

IE22

NRC FORM 366 (6-2004) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 06/30/2007

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Dresden Nuclear Power Station, Unit 3	05000249	1 OF 3

4. TITLE
Unit 3 High Pressure Coolant Injection System Declared Inoperable

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									N/A	N/A
03	02	2007	2007	- 001 -	00	05	01	2007	FACILITY NAME: N/A	DOCKET NUMBER: N/A

9. OPERATING MODE
1

10. POWER LEVEL
100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: *(Check all that apply)*

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☐ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☒ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER (Include Area Code)
Dresden Nuclear Power Station – George Papanic Jr.	(815) 416-2815

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
NA					NA				

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On March 2, 2007, at 1912 hours (CST), with Unit 3 at approximately 100 percent power, Dresden Nuclear Power Station control room personnel were notified of a very small through wall leak on the Unit 3 High Pressure Coolant Injection System Inlet Drain Pot drain piping. To repair the leaking location, the piping was isolated which resulted in the isolation of the Unit 3 High Pressure Coolant Injection System. The Unit 3 High Pressure Coolant Injection System was declared inoperable and Technical Specification 3. 5.1, "ECCS Operating," was entered. The piping was replaced and the Unit 3 High Pressure Coolant Injection System was declared operable on March 3, 2007, at 0403 hours (CST).

The apparent cause of the through wall leak was the existence of carbon steel piping in the Unit 3 High Pressure Coolant Injection System Inlet Drain Pot drain piping that was susceptible to Flow Accelerated Corrosion. This piping was originally scheduled for replacement under the Flow Accelerated Corrosion Program in 1997; however the work documentation associated with this piping replacement failed to adequately identify that not all of the original work scope was completed. As a result, the carbon steel piping was incorrectly removed from the Flow Accelerated Corrosion Inspection Program. Corrective action include the incorporation of all Unit 2 and Unit 3, High Pressure Coolant Injection System carbon steel piping susceptible to Flow Accelerated Corrosion into the Flow Accelerated Corrosion Inspection Program and the scheduling of the replacement of this carbon steel piping in future outages.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBE	
Dresden Nuclear Power Station Unit 3	05000249	2007	-- 001 --	00	2 OF 3

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

Dresden Nuclear Power Station (DNPS) Unit 3 is a General Electric Company Boiling Water Reactor with a licensed maximum power level of 2957 megawatts thermal. The Energy Industry Identification System codes used in the text are identified as [XX].

A. Plant Conditions Prior to Event:

Unit: 03 Event Date: 3-2-2007
Reactor Mode: 1 Mode Name: Power Operation Power Level: 100 percent
Reactor Coolant System Pressure: 1000 psig

B. Description of Event:

On March 2, 2007, at 1912 hours (CST), with Unit 3 at approximately 100 percent power, DNPS control room personnel were notified of a very small through wall steam leak on the Unit 3 High Pressure Coolant Injection (HPCI) [BG] System Inlet Drain Pot drain piping [DRN] downstream of valve 3-2301-55. To repair the leaking location, the piping was isolated which resulted in the isolation of the Unit 3 HPCI System. The Unit 3 HPCI System was declared inoperable and Technical Specification (TS) 3.5.1, "ECCS Operating," was entered. Non Destructive Examination of the HPCI System piping identified a pinhole leak 5/8 inches downstream of the valve 3-2301-55 weld toe. The piping containing the pinhole leak was replaced.

An ENS call was made on March 2, 2007, at 2133 hours (CST) for the above-described event. The assigned ENS event number was 43209.

The Unit 3 HPCI System was declared operable on March 3, 2007, at 0403 hours (CST).

This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident." HPCI is a single train system and is credited in mitigating the consequences of an accident.

C. Cause of Event:

The apparent cause of the through wall leak was the existence of carbon steel piping in the Unit 3 High Pressure Coolant Injection System Inlet Drain Pot drain piping that was susceptible to Flow Accelerated Corrosion (FAC).

DNPS had previously generated five Work Orders (WO) to schedule and perform the replacement of carbon steel piping susceptible to FAC with A-335 P-11 chrome-moly piping. Four of the five WO's were performed after 2002 and contained sufficient closeout documentation to clearly identify the piping that was replaced and the material used. The remaining WO was performed in 1997 and the closeout documentation did not clearly identify the work performed. The scope of this WO included the HPCI System carbon steel piping associated with this event. A review of the performance of the 1997 WO identified that numerous revisions and work scope changes were made, resulting in WO

closure documentation that did not clearly document that not all of the original work scope was completed. As a result, several sections of Unit 2 and 3 HPCI System piping susceptible to FAC that were not replaced were incorrectly removed from the FAC Inspection Program.

D. Safety Analysis:

The safety significance of the event is minimal. TS 3.5.1 allows Unit 3 to remain at power for 14 days with an inoperable HPCI if the Isolation Condenser System (IC) is operable. Unit 3 was in compliance with TS 3.5.1 during this event as the IC was operable and HPCI was inoperable for approximately 9 hours. Therefore, the consequences of this event had minimal impact on the health and safety of the public and reactor safety.

E. Corrective Actions:

Unit 3 HPCI System Inlet Drain Pot drain piping with the pinhole leak was replaced.

Unit 2 and 3 HPCI System carbon steel piping susceptible to FAC has been identified, evaluated for acceptance of the degraded condition until replacement and scheduled for replacement in future outages.

The Work Control process has been significantly enhanced since 1997 to ensure sufficient closeout documentation including the use of a computerized process (PASSPORT) for entering closeout documentation, implementation of procedure MA-AA-716-011, "Work Execution and Closeout," and the use of First Line Supervisors to enter work documentation notes.

F. Previous Occurrences:

A review of DNPS Licensee Event Reports (LERs) for the last three years did not identified any LERs associated with piping that was found with a through wall leak and susceptible to FAC.

G. Component Failure Data:

NA