Exelon Generation®

Dresden Nuclear Power Station
6500 North Dresden Road
Morris, IL 60450
815 942 2920 Telephone
www.exeloncorp.com

10 CFR 50.73

July 23, 2012

SVPLTR # 12-0040

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

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Subject: Licensee Event Report 237/2012-002-00, Inlet Steam Drain Pot Drain Line Leaks Result in HPCI Inoperabilities

Enclosed is Licensee Event Report 237/2012-002-00, "Inlet Steam Drain Pot Drain Line Leaks Result in HPCI Inoperabilities." 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."

This is an interim report. Following the completion of the casual analysis, a final report will be submitted.

There are no regulatory commitments contained in this submittal.

Should you have any questions concerning this letter, please contact Mr. Hal Dodd at (815) 416-2800.

Respectfully,

David M. Czufin
Site Vice President
Dresden Nuclear Power Station

Enclosure

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

IE22
NRR

NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2013

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@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 2	05000237	1 OF 3

4. TITLE

Inlet Steam Drain Pot Drain Line Leaks Result in HPCI Inoperabilities

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
									Dresden Unit 3	05000249
05	22	2012	2012	- 002 -	00	07	23	2012	FACILITY NAME: N/A	DOCKET NUMBER: 05000

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

NAME	TELEPHONE NUMBER *(Include Area Code)*
Riley Ruffin – Regulatory Assurance	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
X	BJ	PSF	Unknown	Y					

14. SUPPLEMENTAL REPORT EXPECTED

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

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR
12	31	2012

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

On May 22, 2012, at 1055 hours CDT, plant personnel identified a small steam leak from the Unit 2 High Pressure Coolant Injection (HPCI) Inlet Drain Pot Drain line. Additionally, on June 10, 2012, at 0200 hours CDT, plant personnel identified a small steam leak from the Unit 3 HPCI Inlet Drain Pot Drain line. The drain line connects the HPCI Inlet Drain Pot to the Main Condenser. Following removal of piping insulation, it was determined that the piping had a through-wall leak on a 90 degree elbow upstream of the inboard drain line isolation valve. The steam supplies for the HPCI systems were isolated and declared inoperable. Technical Specification 3.5.1, Condition G was entered and required actions taken.

The failure mechanism of the through-wall leaks have not been identified at this time. A failure analysis is currently being performed to determine the cause of the failures. The leaking pipes were replaced with stainless steel piping components. Following completion of the analysis, a final report will be submitted.

The safety significance of this condition is low. Following isolation of HPCI, Automatic Depressurization and Low Pressure Emergency Core Cooling Systems were available and capable of providing makeup to the reactor vessel inventory. The health and safety of the public were not compromised as a result of this condition.

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."

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Dresden Nuclear Power Station, Unit 2	05000237	2012	- 002 -	00	2 OF 3

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

Dresden Nuclear Power Station (DNPS) Units 2 and 3 are General Electric Company Boiling Water Reactors 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: 02	Event Date: 5-22-2012	Event Time: 1055 hours CDT
Reactor Mode: 1	Mode Name: Power Operation	Power Level: 100 percent
Unit: 03	Event Date: 6-10-2012	Event Time: 0200 hours CDT
Reactor Mode: 1	Mode Name: Power Operation	Power Level: 100 percent

B. Description of Event:

On May 22, 2012, at 1055 hours CDT plant personnel identified a small steam leak in the Unit 2 Turbine Building. The leak was from the High Pressure Coolant Injection (HPCI) [BJ] Inlet Drain Pot Inboard Drain line to the Main Condenser [SG]. Following removal of piping insulation, it was determined that the piping had a through-wall leak on a 90 degree Chrome-Molybdenum socket elbow upstream of Air Operated Valve 2-2301-29. The Unit 2 HPCI system was isolated and declared inoperable and Technical Specification 3.5.1, Condition G was entered and required actions taken.

Additionally, on June 10, 2012, at 0200 hours CDT plant personnel identified a small steam leak in the Unit 3 Turbine Building. The leak was from the HPCI Inlet Drain Pot Inboard Drain line to the Main Condenser. Following removal of piping insulation, it was determined that the piping had a through-wall leak on a 90 degree Chrome-Molybdenum socket elbow upstream of Air Operated Valve 3-2301-29. The Unit 3 HPCI system was isolated and declared inoperable and Technical Specification 3.5.1, Condition G was entered and required actions taken.

In each case, the Unit 2 and Unit 3 HPCI systems were taken out of service to secure the leaks and allow repair activities to be performed. The piping sections were replaced with stainless steel piping components and the HPCI systems were returned to service on May 25, 2012, and June 12, 2012, respectively.

Upon isolating the HPCI systems, this event became reportable pursuant to 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."

C. Cause of Event:

Currently, a failure analysis is being performed. Following completion of the analysis, a supplemental report will be submitted including the identified cause of the piping failures.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV NO.	
Dresden Nuclear Power Station, Unit 2	05000237	2012	- 002 -	00	3 OF 3

NARRATIVE

D. Safety Analysis:

The safety significance of this condition is low. The Automatic Depressurization and Low Pressure Emergency Core Cooling Systems [BO] [BM] were available to provide makeup to the reactor vessel inventory in the event of an accident or transient. Additionally, the respective Isolation Condenser [BL] systems were available for reactor vessel pressure control, if required. Therefore, health and safety of the public were not compromised as a result of this condition.

E. Corrective Actions:

The failed piping sections were replaced with stainless steel piping components and post-maintenance tested satisfactorily. Following the completion of the causal analysis, additional actions will be developed and planned for implementation.

F. Previous Occurrences:

A review of DNPS Licensee Event Reports (LERs) for the last three years revealed the following reportable conditions related to HPCI inoperabilities:

- LER 237/2009-002, "Unit 2 High Pressure Coolant Injection Suction Valve Fails to Close"
- LER 237/2011-002, "Steam Leak Results in HPCI Inoperability"
- LER 249/2010-003, "Steam Leak Results in HPCI Inoperability."

The corrective actions from the above Licensee Event Reports would not have prevented the current HPCI inoperability.

G. Component Failure Data:

Manufacturer	Component Type	Model
N/A	1" Schedule 80 A335 P11 (Chorme Moly) 90° socket elbow	N/A