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July 28, 2000

PSLTR: #00-0107

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

Dresden Nuclear Power Station, Unit 2
Facility Operating License No. DPR-19
NRC Docket No. 50-237

Subject: Licensee Event Report 2000-002-00, "Failure to recognize that the condition of the degraded ASME Section XI Class piping/weld required entry into TS 3.6.N due to lack of understanding of the TS bases"

The enclosed Licensee Event Report, which is a final report, describes the failure to recognize that the condition of the degraded ASME Section XI Class piping/weld required entry into Technical Specification (TS) 3.6.N "Structural Integrity," due to lack of understanding of the TS bases. This condition is being reported pursuant to 10 CFR 50.73 (a)(2)(i) (B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

This correspondence contains the following commitments:

Train the Engineering Department on the 2D CCSW Pump discharge piping weld leak, TS 3/4.6.N and Generic Letter (GL) 90-05. This training will correct the knowledge deficiency identified in the root cause.

Train the licensed operators on the events surrounding the 2D CCSW Pump discharge piping weld leak, TS 3/4.6.N and GL 90-05.

Train Engineering personnel on the ASME Section XI criteria for through-wall leakage.

Revise the bases of TS 3.6.N "Structural Integrity," to state ASME Section XI Class 1, 2, or 3 boundary leakage is not allowed.

Review qualification requirements for performing operability evaluations.

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If you have any questions, please contact Dale Ambler, Dresden Regulatory Assurance Manager at (815) 942-2920 extension, 3800.

Respectfully,

A handwritten signature in cursive script that reads "Preston Swafford".

Preston Swafford
Site Vice President

Dresden Nuclear Power Station

Enclosure

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

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory information collection request: 50 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-6 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. If 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.

FACILITY NAME (1) Dresden Nuclear Power Station, Unit 2			DOCKET NUMBER (2) 05000237	PAGE (3) 1 of 3
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TITLE (4)
Failure to Recognize Degraded Condition of ASME Section XI classed piping/weld required entry into Technical Specification due to Lack of Understanding of the TS bases

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MON	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	28	2000	2000	002	00	07	28	2000	N/A	05000249
									N/A	N/A

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (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)(i)		20.2203(a)(3)(i)		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)		OTHER			
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify 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 Timothy P. Heisterman, Regulatory Assurance	TELEPHONE NUMBER (Include Area Code) (815) 942-2920 Ext. 3324
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> X	<input type="checkbox"/> NO		MONTH	DAY	YEAR
(If yes, complete EXPECTED SUBMISSION DATE).						

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

Technical Specification (TS) 3/4.6.N "Structural Integrity" requires that structural integrity of American Society of Mechanical Engineers (ASME) Code Class 1, 2 and 3 components be maintained.

On April 15, 2000, a small amount of water was found on the floor below the 2D Containment Cooling Service Water (CCSW) Pump discharge elbow following a surveillance test in support of the quarterly High Pressure Coolant Injection (HPCI) Inservice Test (IST) run. Engineering was notified and inspected the piping and the weld on the discharge side of the pump. No leakage was observed. A condition report was written and a pump run scheduled to inspect for leakage at operating pressure. The 2D CCSW Pump run was performed and moisture developed on the weld, this was not enough moisture to drip off of the pipe. Operations logged the inspection as "no leakage".

On June 7, 2000, during a 2D CCSW pump run, the leak through the weld was observed to have increased to approximately 1-2 gpm, however TS 3/4.6.N was not immediately entered. The TS was entered on June 8, 2000, after being identified as applicable by Engineering.

The root cause is a failure to recognize the leak of the CCSW pipe constituted a loss of structural integrity and required immediate entry into TS 3/4.6.N due to a knowledge deficiency with regards to the requirements of GL 90-05 "Guidance for Performing Temporary Non-Code Repair of ASME Code Class 1, 2, and 3 Piping" and the applicability of TS 3/4.6.N.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Dresden Nuclear Power Station, Unit 2	DOCKET (2) 05000237	LER NUMBER (6)			PAGE (3) 2 OF 3
		YEAR 2000	SEQUENTIAL NUMBER 002	REVISION NUMBER 00	

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

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2527 MWt rated core thermal power

Energy Industry Identification System (EIS) Codes are identified in the text as [XX] and are obtained from IEEE Standard 805-1984, IEEE Recommended Practice for System Identification in Nuclear Power Plants and Related Facilities.

EVENT IDENTIFICATION:

Failure to recognize that the condition of the degraded ASME Section XI Class piping/weld required entry into TS 3.6.N due to lack of understanding of the TS bases

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 2	Event Date: 06-28-2000	Event Time: 16:30
Reactor Mode: 1	Mode Name: Run	Power Level: 100
Reactor Coolant System Pressure: 1002 psig		

B. DESCRIPTION OF EVENT:

This LER is being submitted pursuant to 10 CFR 50.73 (a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications (TS).

On April 15, 2000, a small amount of water was identified on the floor below the 2D CCSW [CC] Pump discharge elbow following the performance of Suppression Pool cooling in support of the quarterly HPCI IST run. Engineering was informed of the situation and went to inspect the subject discharge piping and weld. The engineer noted a dried rust stain on the floor below the 2D CCSW Pump discharge elbow and that the pump discharge elbow weld was rusty on the bottom of the pipe.

On April 18, 2000, Operations along with the engineer and the Inservice Inspection (ISI) coordinator a visually inspected the weld. The inspection noted missing paint and a light layer of corrosion on the bottom of the pump discharge elbow weld and the poor quality of the weld, but no wetness was observed. The suspect area of the weld was cleaned (scotch-brited) and examined. Still, no wetness was observed at the weld. This condition was reported to Operations who judged it to be a potential concern and arranged to run the pump and duplicate the potential leakage conditions.

On April 21, 2000, a 2D CCSW pump run was performed to observe the 2D CCSW Pump at required IST flow and pressure and a drip of water on the weld was observed. These results were documented in the surveillance and the Unit 2 Unit Supervisor's log read, "System Engineer found no leakage." At this time the 2D CCSW Pump was considered to be operable, as it was able to develop the required differential pressure at the proper flow per the pump operability procedure.

On April 24, 2000 Engineering initiated a request to repair the weld and prepared the appropriate ASME Section XI Repair and Replacement plan. In addition, an Operability Evaluation was initiated to determine 2D CCSW Pump discharge piping operability. Based upon the actions taken and the determination that the 2D CCSW Pump was operable, the ASME Section XI pipe repair was not viewed to be urgent.

On June 7, a leak of 1-2 gpm was observed at the suspect 2D CCSW Pump discharge elbow weld while preparing to perform a pump down of the Unit 2 Suppression Pool water to the Unit 2 Main Condenser hotwell. The pump was immediately stopped. Engineering determined a revision to the Operability Evaluation was required. It was at this time that the issues surrounding Generic Letter 90-05 guidance and TS 3/4.6.N, "Structural Integrity" applicability, were identified by Engineering. A non-destructive examination was performed in the area immediately adjacent to the weld. Although, no readings could be taken directly on the weld due to the roughness of the surface, sound metal was found immediately upstream and downstream of the leak and no indication of wall thinning was found.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
Dresden Nuclear Power Station, Unit 2	05000237	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		2000	002	00	

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

On June 8, 2000 at 1555 hours entry was made into TS 3/4.6.N. At 1826, TS 3/4.8.A, "Containment Cooling Service Water", was entered and the 2D CCSW pump was removed from service. The weld defect was removed, an ASME Code weld repair was performed and the 2D CCSW Pump declared operable at 0431 on June 10, 2000 following the post-maintenance testing.

On Wednesday June 28, PIF D2000-03593 was written to document the potential violation for exceeding the 30-day Limiting Condition of Operation for the 2D CCSW Pump based upon review of TS 3/4.6.N and 3/4.8.A. Determination was made that the CCSW pump was to be considered inoperable from April 15, 2000 to June 8, 2000, which exceeds the requirements allowed by TS.

C. CAUSE OF EVENT:

The root cause is a failure to recognize that the leak of the CCSW pipe constituted a loss of structural integrity and required immediate entry into TS 3/4.6.N due to a knowledge deficiency with regards to the requirements of GL 90-05 and the applicability of TS 3/4.6.N. (NRC Cause Code X)

Contributing causes included the initial failure to identify the formation of the drip on the weld as a leak, TS 3/4.6.N bases was not apparent that the TS needed to be entered, and the inadequacies of the operability evaluation in recognizing this concern.

D. SAFETY ANALYSIS

The CCSW system was shown to meet its pressure and flow requirements and would have performed its intended safety function. The inspections performed showed that the areas surrounding the piping indicated minimum wall thickness was not compromised during this event. Based on this, the health and safety of the public were not compromised at any time during this condition. There was no safety system functional failure associated with this event. Thus, the safety significance of this condition is minimal.

E. CORRECTIVE ACTIONS:

Train the Engineering Department on the 2D CCSW Pump discharge piping weld leak, TS 3/4.6.N and GL 90-05. This training will correct the knowledge deficiency identified in the root cause. (ATI # 31476 -06)

Train the licensed operators on the events surrounding the 2D CCSW Pump discharge piping weld leak, TS 3/4.6.N and GL 90-05. (ATI # 31476-07)

Train Engineering personnel on the ASME Section XI criteria for through-wall leakage. (ATI # 31476-08)

Revise the bases of TS 3.6.N, Structural Integrity, to state "ASME Section XI class 1, 2, or 3 boundary leakage is not allowed. (ATI # 31476-09)

Review qualification requirements for performing operability evaluations. (ATI # 31476-10)

F. PREVIOUS OCCURRENCES:

None

G. COMPONENT FAILURE DATA:

N/A