LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
Dresden Nuclear Power Station, Unit 3	0 5 0 0 0 2 4 9	1 of 0 3

TITLE (4) Primary Containment Clean Demineralized Water Isolation Valve Discovered Open Due to Procedure Inadequacy

Event Date (5)			LER Number (6)			Report Date (7)			Other Facilities Involved (8)	
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Names	Docket Number(s)
									N/A	
0 6	2 8	8 8	8 8	0 1 2	0 0	0 7	2 8	8 8	N/A	

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 4 9	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER AREA CODE
Michael Moy, Technical Staff Engineer Ext. 421	8 1 5 9 4 2 - 2 9 2 0

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		Expected Submission Date (15)	Month	Day	Year
Yes (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On June 28, 1988 at 1330 hours during Unit 3 operation at 49% rated core thermal power, the manual outboard isolation valve for the clean demineralized water supply to the drywell, 3-4327-500, was discovered to be open and unlocked. The valve was immediately closed and locked.

The root cause of this event is procedure inadequacy. This particular valve was not inspected for proper position prior to unit startup. The valve is hypothesized to have been opened during the Spring 1988 refueling outage to facilitate drywell hydrolazing.

The clean demineralized water line is not directly connected to any primary system within the drywell. The clean demineralized water system pressure is greater than the pressure that would be experienced within the drywell during a design basis Loss of Coolant Accident (LOCA). The manual inboard isolation valves for the clean demineralized water inside the drywell were closed as verified by the fact that no significant input to the drywell sumps was noted. The amount of time the valve was open during unit operation was approximately three days. For these reasons, the safety significance of this event was considered to be minimal. To prevent recurrence, this valve will be added to the locked valve checklist and to the pre-startup drywell inspection plan procedure.

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PLANT AND SYSTEM IDENTIFICATION:

General Electric Boiling Water Reactor - 2527 MWt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

EVENT IDENTIFICATIONS:

Primary Containment (drywell) [NH] clean demineralized water [KC] supply manual outboard isolation valve, 3-4327-500, was discovered to be open during unit operation following the completion of the Spring 1988 refueling outage.

A. CONDITIONS PRIOR TO EVENT

Unit: 3 Event Date: June 28, 1988 Event Time: 1330 hrs.

Reactor Mode: N Mode Name: Run Power Level: 49%

Reactor Coolant System (RCS) Pressure: 1000 psig

B. DESCRIPTION OF EVENT

On June 28, 1988 at 1330 hours during normal Unit 3 operation at 49% rated core thermal power in a post refueling outage startup condition, the drywell clean demineralized water supply manual outboard isolation valve, 3-4327-500, was discovered to be open and unlocked. The required position of this valve during unit operation is locked closed. The open valve was discovered by an Operating Department Shift Foreman during a routine plant inspection and was immediately closed and locked. Subsequently, the clean demineralized water supply to the drywell manual outboard isolation valve for Unit 2 was inspected and verified to be properly locked closed. In addition, the service air [LF] drywell isolation valves were also inspected and verified to be closed on both Unit 2 and Unit 3. As an additional precaution, Dresden Operating Procedure DOP 040-M4, Unit 3 Locked Valve Checklist Accessible During Operation, was completed a second time following the Unit 3 refueling outage to verify that no other valves required to be locked closed during unit operation were inadvertently left open.

No other systems or components were in a condition that contributed to this event.

C. APPARENT CAUSE OF EVENT

The root cause of this event has been attributed to procedure inadequacy. The clean demineralized water supply manual outboard isolation valve, 3-4327-500, is not listed in DOP 040-M4 and was not inspected prior to unit startup. The Unit 3 Spring 1988 refueling outage had just been completed on June 26, 1988 and it is hypothesized that the valve was opened during the outage to facilitate hydrolazing operations taking place in the drywell.

D. SAFETY ANALYSIS OF EVENT

The clean demineralized water supply line is isolated by manual valve 3-4327-500 and does not directly connect to any primary systems within the drywell, therefore, no path for a release of primary system process material from the drywell existed. Drywell pressure during the design basis LOCA is approximately 48 psig. Since clean demineralized water system pressure is approximately 120 psig and, if the design basis LOCA had occurred with valve 3-4327-500 open, in conjunction with a seismic event causing a rupture of the clean demineralized water line within the drywell, flow in this line would have been from outside the drywell to within the drywell. Additionally, the clean demineralized water isolation valves within the drywell were closed since no flow into the drywell or any substantial unidentified leakage had been noted. These manual inboard isolation valves were visually verified as closed by an Operating Department Shift Foreman a few days prior to the final drywell close out prior to operation. The amount of time this valve was improperly positioned was approximately three days. This valve was required to be closed once primary containment was required. This was required on June 25, 1988 when Unit 3 reactor went critical at 1100 hours.

For the above reasons, the safety significance of this event was considered to be minimal.

E. CORRECTIVE ACTION

Immediate corrective action was the closing and locking of manual isolation valve 3-4327-500 upon discovery. Also, as previously stated, the identical valve for Unit 2 was verified to be properly locked closed, the service air to drywell isolation valves outside the drywell for both units were verified to be closed, and DOP 040-M4 was completed for a second time as additional precautionary measures.

To prevent recurrence of this event, the clean demineralized water supply manual isolation valve 3-4327-500 will be added to DOP 040-M4 (249-200-88-07301) and to Dresden Operating Surveillance (DOS) 1600-10, Pre-Startup Drywell Inspection Plan (249-200-88-07302). The Unit 2 clean demineralized water manual outboard isolation will also be added to the proper procedures (249-200-88-07303).

F. PREVIOUS OCCURRENCES

LER Number	Title
85-007/050-249	Torus Water Sample Line Found Open

This event involved discovery of an open torus sample valve, which was in violation of primary containment integrity requirements. The valve was locked closed and appropriate procedure revisions initiated. Similar sample and drain taps were also inspected.

G. COMPONENT FAILURE DATA

There were no component failures in this event therefore this section is not applicable.

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July 27, 1988

EDE LTR #88-565

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Document Control Desk
Washington, D.C. 20555

Licensee Event Report #88-012-0, Docket #050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(i)(B).

E.D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE/ade

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
File/NRC
File/Numerical

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