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ComEd

June 26, 1995

TPJLTR 95-0070

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Licensee Event Report 95-010, Docket 50-249 is being submitted as required by Technical Specification 6.6 and 10CFR50.73(a)(2)(v).

Sincerely,

T. P. Joyce

Thomas P. Joyce
Site Vice President

TPJ/RF:pt

Enclosure

cc: J. Martin, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95
LICENSEE EVENT REPORT (LER)	ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Dresden Nuclear Power Station, Unit 3	05000249	1 OF 4

TITLE (4)
Inadvertent LCO Entry Due to Inadequate Control of Decay Heat During Cooldown

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 NAME None	DOCKET NUMBER
05	28	95	95	-- 010 --	00	06	26	95	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
			20.2201(b)		20.2203(a)(3)(i)		50.73(a)(2)(iii)		73.71(b)
POWER LEVEL (10)	000		20.2203(a)(1)		20.2203(a)(3)(ii)		50.73(a)(2)(iv)		73.71(c)
			20.2203(a)(2)(i)		20.2203(a)(4)	X	50.73(a)(2)(v)		OTHER
			20.2203(a)(2)(ii)		50.36(c)(1)		50.73(a)(2)(vii)		(Specify in Abstract below and in Text, NRC Form 366A)
			20.2203(a)(2)(iii)		50.36(c)(2)		50.73(a)(2)(viii)(A)		
			20.2203(a)(2)(iv)		50.73(a)(2)(i)		50.73(a)(2)(viii)(B)		
			20.2203(a)(2)(v)		50.73(a)(2)(ii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)	
NAME	TELEPHONE NUMBER (Include Area Code)
Ralph Fenili, Operations Staff Ext. 2917	(815) 942-2920

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	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 15 single-spaced typewritten lines) (16)

On May 28, 1995 at 2015 hours, during vessel moderator cooldown following a reactor scram, Unit 3 experienced a reduction in RHR capability as a result of Operator system manipulation.

With the Isolation Condenser manually isolated per station procedure, the unit began a slow heatup from the removal from service of an auxiliary steam system load. Reactor coolant pressure exceeded 150# (for 5 minutes) at 2015 hours, entering the Unit into a 7 day Technical Specification LCO for the unavailability of the Isolation Condenser.

The Operating Team re-established the reactor cooldown at 2017 hours and pressure decreased to less than 150# at 2020 hours, exiting the LCO. This event of short duration had minimal affect on reactor safety. Corrective Actions include additional training on RHR alternatives, procedure change to better control the cooldown evolution, repairs to alternate cooldown paths which were degraded during this event and simulator upgrade to provide better training.

This event is reportable per 10CFR50.73(a)(2)(v)(B), event causing loss of a safety system designed to remove residual heat.

EVENT IDENTIFICATION:

Inadvertent LCO Entry Due to Inadequate Control of Decay Heat During Cooldown

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3 Event Date: May 28, 1995 Event Time: 2020

Reactor Mode: N Mode Name: Shutdown Power Level: 0%

Reactor Coolant System Pressure: 145 psig

B. DESCRIPTION OF EVENT:

On May 28, 1995, at 2015 hours, during vessel moderator cooldown following a reactor scram, Unit 3 experienced a reduction in RHR capability [AINB] as a result of Operator system manipulation.

On the day shift, the Operating Team secured the Steam Jet Air Ejectors [SH], in accordance with Dresden General Procedure (DGP) 02-01, Reactor Shutdown. This activity was performed correctly, but earlier than historically done. The effect of the removal of one of the unit's auxiliary heat loads was not recognized by the afternoon Unit Supervisor. At 1943 hours, with Reactor pressure approximately 145#, the Unit Supervisor directed the Operating Team to secure the Isolation Condenser [BL] from its standby condition, in accordance with DGP 02-01. DGP 02-01 directs the Operator to secure the Main Turbine Steam Seal System [TC] when condenser vacuum reaches 0"Hg. The Operator secured the Steam Seal System resulting in a slow heatup on the reactor coolant from the removal of a heat removal source.

Recognizing that the reactor moderator temperature and pressure were slowly increasing, the Operating Team took parallel paths to address the problem. One Reactor Operator was directed to restore the Isolation Condenser to standby readiness, another attempted to re-establish a cooldown of the vessel through alternate means, as directed in Dresden Operating Abnormal Procedure (DOA) 1000-01, Residual Heat Removal Alternatives. The initial Operator response was to increase the blowdown rate through the Reactor Water Cleanup System [CE], attempting to force a cooldown through increased flow from the Feedwater System [SJ]. With the increased Reactor Water Cleanup blowdown only able to slow the heatup rate, the coolant pressure exceeded 150# at 2015 hours, placing the unit in a 7 day Technical Specification LCO for the unavailable Isolation Condenser.

The Operating Team re-established the reactor cooldown at 2017 hours by placing the Turbine Steam Seal system back into service and pressure decreased to less than 150# at 2020 hours, exiting the LCO.

This event is viewed as an inadvertent entry in the Station Technical Specifications as a result of Isolation Condenser inoperability during a reduction of heat removal capability during moderator cooldown.

C. CAUSE OF EVENT:

This report is submitted in accordance with Title 10 of the Code of Federal Regulation Part 50 Section 73(A)(2)(v)(B), which states that any event that results in a loss of a safety system designed to remove residual heat, the licensee shall provide a written report to the NRC.

Discussions with the Operating Team found a weakness in understanding the amount of residual heat removed by the auxiliary steam loads, specifically that of the Steam Seal System. Combined with coolant system temperature being too high for Shutdown Cooling [BO] availability and Motor Operated Valve (MOV) 3-220-1 inoperability, preventing heat removal via the Main Steam Line Drains, the Operator had limited systems available for heat removal. The Operators action to restore heat removal through the Steam Seal System was the proper course of action.

Secondly, the Unit Supervisors failed to question the differences in Unit system configuration, compared to previous Unit shutdowns. This failure to utilize a questioning attitude resulted in the Team having insufficient ability to maintain a cooldown when the Steam Seal System was secured.

Lastly, the Operating Crew failed to address contingencies, prior to the securing of the Steam Seal System.

D. SAFETY ANALYSIS:

The Isolation Condenser, designed to mitigate the consequences of a loss of the Main Condenser [SG] at full power operation, was capable of being placed back into operable status quickly. Considering the status of the unit (shutdown with all control rods fully inserted) and the low coolant pressure and temperature at which the event occurred, the safety significance of this event is considered minimal.

E. CORRECTIVE ACTIONS:

The Dresden Training Department will train all licensed Operators on Residual Heat Removal Alternatives. (NTS# 249-180-95-01001)

The Dresden Training Department will provide simulator demonstrations for all licensed Operators on the moderator cooldown effects of securing of one or more heat removal paths. (NTS# 249-180-95-01002)

The Operating Manager will reinforce to the Shift Managers, Field and Unit Supervisors, the importance of preparing contingency plans for major plant evolutions. (NTS# 249-180-95-01003)

The Dresden Training Department will train Operations Supervision on performing briefings, including contingency planning. (NTS# 249-180-95-01004)

The Station will prioritize the repair of the MO 3-0220-01, Main Steam Line Drain valve. (NTS# 249-180-95-01005)

The Operations Procedure Writers will revise the Unit Shutdown Procedure, DGP 02-01, to reflect utilizing the SJAE and Steam Seal systems as long as possible, as heat removal loads for the reactor. (NTS# 249-180-95-01006)

The Dresden Training Department will evaluate the simulator auxiliary heat loads model and formulate a plan for any needed upgrade, in a timely manner. (NTS# 249-180-95-01007)

The Operations Manager will review how to make training available to Operators, through cycle training, for planned startups and shutdowns. (NTS# 249-180-95-01008)

F. PREVIOUS OCCURRENCES:

None.

G. COMPONENT FAILURE DATA:

None.