LICENSEE EVENT REPORT

CONTROL BLOCK: [| | | | | |] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Line	Field	Value
01	LICENSEE CODE (2)	I L D R S 3
01	LICENSE NUMBER (3)	0 0 - 0 0 0 0 0 - 0 0
01	LICENSE TYPE (4)	4 1 1 1 1
01	CAT (5)	
01 CON'T	REPORT SOURCE (6)	L
01 CON'T	DOCKET NUMBER (7)	0 5 0 0 0 2 4 9
01 CON'T	EVENT DATE (8)	1 2 2 1 8 0
01 CON'T	REPORT DATE (9)	1 2 2 9 8 0

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 Reactor pressure exceeded 90 psig and primary coolant temperature exceeded 212 degrees
03 Fahrenheit with HPCI System and Isolation Condenser out of service and Primary Contnmt.
04 Integrity broken. There was minimal effect on public health and safety since all
05 other ECCS Systems were functioning and there was no deviation in reactor water level.
06 This is the first event of its kind.
07
08

Line 09	SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
09	S A	D	Z	Z Z Z Z Z Z	Z	Z

LER/RO REPORT NUMBER (17)	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 0	—	0 4 7	/	0 1	T	—	0

ACTION TAKEN (18)	FUTURE ACTION (19)	EFFECT ON PLANT (20)	SHUTDOWN METHOD (21)	HOURS (22)	ATTACHMENT SUBMITTED (23)	NPRD-4 FORM SUB. (24)	PRIME COMP. SUPPLIER (25)	COMPONENT MANUFACTURER (26)
X	G	Z	Z	0 0 0 0	Y	N	N	Z 9 9 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Procedural inadequacy to address temperature stratification within the reactor vessel
11 with recirc. pumps off and low shutdown cooling flow caused this event. Long-term
12 corrective actions include issuing an operating order, making a procedure change and
13 considering system modifications. Immediate corrective action was to increase shut-
14 down cooling flow which brought temperature and pressure within limits.

Line 15	FACILITY STATUS (28)	% POWER (29)	OTHER STATUS (30)	METHOD OF DISCOVERY (31)	DISCOVERY DESCRIPTION (32)
15	G	0 0 0	NA	A	Operator Observation

Line 16	ACTIVITY RELEASED (33)	CONTENT OF RELEASE (34)	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
16	Z	Z	N/A	N/A

PERSONNEL EXPOSURES

Line 17	NUMBER (37)	TYPE (38)	DESCRIPTION (39)
17	0 0 0	Z	N/A

PERSONNEL INJURIES

Line 18	NUMBER (40)	DESCRIPTION (41)
18	0 0 0	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

Line 19	TYPE (42)	DESCRIPTION
19	Z	N/A

PUBLICITY

Line 20	ISSUED (44)	DESCRIPTION (45)	NRC USE ONLY
20	N	N/A	

8101060471

Procedure, DOP 1000-3, is revised to include a precaution to maintain surveillance of the back panel reactor vessel metal temperature recorder when operating the shutdown cooling system with the reactor recirculation pumps not running. On a long term basis, an investigation into the design of the shutdown cooling system will be conducted to determine changes that could enhance system operation in situations of reduced recirculation flow.

The operating order has already been issued and procedure DOP 1000-3 will be revised by January 1, 1981. A supplemental LER will be issued, once the extent of any system design changes and a schedule for implementation are determined.

ATTACHMENT TO LICENSEE EVENT REPORT 80-47/01T-0
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT 3(ILDRS 3)
DOCKET #050-249

Shortly after achieving a cold shutdown, with recirculation pumps off, Reactor Water Cleanup System isolated and with one loop of shutdown cooling system in operation, it was noted that reactor vessel pressure was 150 PSIG while recirculation loop temperature was 155 degrees fahrenheit. Primary containment integrity had been broken and HPCI and Isolation Condenser were out of service. A second shutdown cooling loop was placed into operation to achieve greater vessel flow to eliminate temperature stratification and when the mixing occurred, recirculation loop temperature temporarily exceeded 212 degrees fahrenheit. Technical Specification Limiting Conditions of Operation 3.5.C.1, 3.5.E.1 and 3.7.A.2 were exceeded during this event. Reactor pressure and water temperatures were immediately reduced to acceptable levels when the second loop was placed into service.

The safety significance of this event is minimal since the reactor was in a shutdown condition, secondary containment integrity was in effect, both low pressure emergency core cooling systems were operational, the shutdown cooling system was in operation, the feedwater system was available and no work was being done that had the potential to drain the vessel. Furthermore, the electromatic relief valves were available to control reactor pressure, water level, was at all times, in the normal operating range. This is the first event of its kind.

The cause of this event is attributable to procedural inadequacy, specifically DOP 1000-3, which fails to address the possibility of temperature stratification in the vessel with recirculation pumps not running.

The corrective actions are based on the need to immediately procedurally address this situation and subsequently to provide system changes.

On an interim basis, an Operating Order has been issued to require the use of two shutdown cooling system loops, one at full flow and the other at a reduced flow to ensure that sufficient flow is available when the recirculation pumps are not running, to prevent temperature stratification of water in the vessel. This Operating Order will remain in effect until the Shutdown Cooling System Operation

Commonwealth Edison

DEVIATION REPORT

DVR NO. STA UNIT YEAR NO.
D- 12- 3 -80 - 101

PART 1 TITLE OF DEVIATION
Inadvertant Repressurization of Reactor Vessel and Exceeding 212° F Moderator Temperature While Drywell Integrity Broken

OCCURRED 12/21/80 DATE 0505 TIME

SYSTEM AFFECTED 200
Reactor

PLANT CONDITIONS
MODE Shutdown PWR(MWT) 0 LOAD(MWE) 0

TESTING ☐ YES ☒ NO

DESCRIPTION OF EVENT
At 0505 it was determined from reactor vessel metal temperatures that the water in the reactor vessel on top was approximately 370° while recirc. loop temperature was 155°. Reactor pressure indicated approximately 150 psig on the control room recorder. (OVER)

DESCRIPTION OF CAUSE
Reactor water stratification.

OTHER APPLICABLE INFORMATION
Drywell interlock door was closed and locked. An additional shutdown cooling loop was put in service to ensure adequate mixing. At 0617 reactor pressure was less than 90 psig.

EQUIPMENT FAILURE ☐ YES ☒ NO | DR NO. N/A | WR NO. N/A | J. Gilligan RESPONSIBLE SUPERVISOR | 12-21-80 DATE

PART 2 OPERATING ENGINEERS COMMENTS
The drywell personnel interlock door was immediately closed to re-established primary containment integrity and the second shutdown cooling heat exchanger was placed in service at maximum cooling flow. Reactor pressure started decreasing almost immediately.

TYPE OF DEVIATION REPORTABLE OCCURRENCE	EVENT OF POTENTIAL PUBLIC INTEREST	TECH SPEC VIOLATION	NON-REPORTABLE OCCURRENCE	ANNUAL REPORTING	SAFETY-RELATED WR ISSUED
☒ 14 DAY ☐ 10CFR21 ☐ 30 DAY NOTIFICATION 6.6.B.1.f	☐	☐	☐	YES ☒ NO ☐	YES ☐ NO ☒

REPORTABLE OCCURRENCE NUMBER
~~50-~~ 80-47/01T-0

ACTION ITEM NO.

PROMPT ON-SITE NOTIFICATION
R. M. Ragan TITLE 12/22/80 DATE 0600 TIME
TITLE DATE TIME

24-HOUR NRC NOTIFICATION
☒ ENS Phone TPH Cecil Thomas ~~REGION XXX~~ 12-21-80 DATE 0740 TIME
☒ TGM REGION III & DOL 12-22-80 DATE 11:29 TIME

PROMPT OFF-SITE NOTIFICATION
F. Palmer TITLE 12/22/80 DATE 10:25 TIME
TITLE DATE TIME
TITLE DATE TIME

RESPONSIBLE COMPANY OFFICER INFORMED OF 10CFR21 CONDITIONS AND THEIR REPORT TO NRC

REVIEW AND COMPLETED Michael Wright OPERATING ENGINEER 12/22/80 DATE

ACCEPTANCE BY STATION REVIEW AS REQUIRED J Brunner 12/30/80 Michael Wright 12-30-80

DATE

RESOLUTION APPROVED AND AUTHORIZED FOR DISTRIBUTION Douglas West STATION SUPERINTENDENT 12/30/80 DATE

86-5176 10-77 (FORM 15-52-1)