

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 feed-water 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



DEVIATION REPORT

Commonwealth Edison

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	OCURRED	12/21/80	0505
SYSTEM AFFECTED	200	DATE		TIME

PLANT CONDITIONS	MODE	Shutdown	PWR (MWT)	0	LOAD (MWE)	0	TESTING	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
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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°.

DESCRIPTION OF CAUSE
Reactor pressure indicated approximately 150 psig on the control room recorder. (OVER)
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	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	DR NO.	N/A	WR NO.	N/A	J. Gilligan	12-21-80
							RESPONSIBLE SUPERVISOR	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
<input checked="" type="checkbox"/> 14 DAY <input type="checkbox"/> 10CFR21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	YES <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
<input type="checkbox"/> 30 DAY NOTIFICATION 6.6.B.1.f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NO <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

REPORTABLE OCCURRENCE NUMBER	ACTION ITEM NO.	PROMPT ON-SITE NOTIFICATION
80X 80-47/01T-0		R. M. Ragan TITLE 12/22/80 DATE 0600 TIME

24-HOUR NRC NOTIFICATION	PROMPT OFF-SITE NOTIFICATION
<input checked="" type="checkbox"/> ENS Phone TPH Cecil Thomas 12-21-80 0740 REGION XXXX DATE TIME	F. Palmer 12/22/80 10:25 TITLE DATE TIME
<input checked="" type="checkbox"/> TGM REGION III & DOL 12-22-80 11:29 DATE TIME	TITLE DATE TIME

RESPONSIBLE COMPANY OFFICER INFORMED OF 10CFR21 CONDITIONS AND THEIR REPORT TO NRC	TITLE	DATE	TIME
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REVIEW AND COMPLETED	Michael Wright	12/22/80
	OPERATING ENGINEER	DATE

ACCEPTANCE BY STATION REVIEW AS REQUIRED	<i>J. Brunner</i>	<i>Michael Wright</i>
DATE	12/30/80	12-30-80
RESOLUTION APPROVED AND AUTHORIZED FOR DISTRIBUTION	<i>Douglas J. Coy</i>	12/30/80
	STATION SUPERINTENDENT	DATE