NRC FORM 366 (7-77)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

UPDATE REPORT:
PREVIOUS REPORT DATE 4/29/77

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

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During routine startup operations, CRD H-8 was found to uncouple and overtravel when
03 withdrawn to pos. 48. All CRD's were inserted to pos. "00" and verified. CRD H-8
04 then withdrawn to pos. 48 and checked for overtravel four separate times. Each check
05 proved satisfactory and the drive was determined to be operable and recoupled. Normal
06 startup operations resumed. CRD blade uncouplings had occurred several times in the
07 past.
08

Line	SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
09	R B	A	F	C R D R V E	Z	Z

LER/RO REPORT NUMBER (17)	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 7	—	0 1 4	/	0 3	X	—	1

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)
G	Z	Z	Z	0 0 0 0	Y	Y	N	G 0 8 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 An unlatched inner filter and abnormally long uncoupling rod resulted in the un-
11 coupling of CRD H-8 during normal startup. Since the last overhaul of CRD H-8 in
12 Jan. 1975, a pull test on the inner filter has been incorporated in the overhaul &
13 assembly procedure. The revised procedure and improved QA coverage believed adequate
14 to prevent future similar events.

Line	FACILITY STATUS (28)	% POWER (29)	OTHER STATUS (30)	METHOD OF DISCOVERY (31)	DISCOVERY DESCRIPTION (32)
15	C	0 0 0	NA	A	Operational Event

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

PERSONNEL EXPOSURES

Line	NUMBER (37)	TYPE (38)	DESCRIPTION (39)
17	0 0 0	Z	NA

PERSONNEL INJURIES

Line	NUMBER (40)	DESCRIPTION (41)
18	0 0 0	NA

LOSS OF OR DAMAGE TO FACILITY (43)

Line	TYPE (42)	DESCRIPTION
19	Z	NA

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PUBLICITY

Line	ISSUED (44)	DESCRIPTION (45)
20	N	NA

NRC USE ONLY

ATTACHMENT TO LICENSEE EVENT REPORT 77-014/03X-1
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT-2 (ILDRS-2)
DOCKET #050-237

During routine start-up operations, control rod drive (CRD) H-8 was found to uncouple and overtravel when withdrawn to position 48. All CRD's were subsequently inserted to position 00 and verified to be fully inserted by computer. CRD H-8 was then withdrawn to position 48 and checked for overtravel four separate times. Each overtravel check proved satisfactory, and the drive was determined to be operable and recoupled. Normal start-up operations were resumed. Control rod drive/blade uncoupling events have occurred several times in the past.

Symptom and performance evaluations indicated that a loosened inner filter in the CRD may have potentially caused the blade and drive to uncouple at the fully withdrawn position. Loosening of the filter could have resulted from a combination of improper installation and latching spring fatique. It was also determined that a loosened filter could not exert sufficient pressure to uncouple the blade except when the drive was fully withdrawn to position 48; upon insertion, the blade and drive automatically recoupled. Because the potential for uncoupling the blade existed only when the drive was fully withdrawn, the safety implications of this event were minimal.

As a precautionary measure, an operating order was issued to ensure that a coupling check was performed whenever drive H-8 was withdrawn to position 48.

On October 20, 1977, CRD H-8 was disassembled and inspected per Control Rod Drive Inspection and Maintenance Procedure DMP 209. To assure a comprehensive inspection a special operation procedure (SOP 216) was prepared and followed.

Upon inspection it was found that the inner filter was unlatched. In addition the distance between the CRD flange and the end of the fully seated uncoupling rod was abnormally long (173.406 + 0.500"). The abnormal length coupled with an unlatched inner filter resulted in the uncoupling of the CRD.

CRD H-8 had been overhauled in January, 1975. Since May, 1975 a 20 to 30 pound pull test on the inner filter has been incorporated in the overhaul and reassembly procedure. Control Rod Drives overhauled and reassembled under the revised procedure have not experienced uncoupling. The revised procedure coupled with improved Quality Control Coverage of CRD overhaul and reassembly are believed adequate to prevent future similar events.