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October 27, 1978

BBS Ltr. #78-1447

James G. Keppler, Regional Director Directorate of Regulatory Operations - Region III U.S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, IL 60137

Reportable Occurrence "Update" Report 77-015/03X-1, Docket #050-237 is hereby submitted to your office to update the cause description and final corrective actions taken to prevent recurrence. This event was reported to your office under Dresden Nuclear Power Station Technical Specification 6.6.B.2.(b), conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

Stephenson

Superintendent Dresden Nuclear Power Station

BBS/deb

Enclosure

cc: Director of Inspection & Enforcement Director of Management Information & Program Control File/NRC

REGULATORY DOCKET FILE COPY



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ARC FORM 366 5. NUCLEAR REGULATORY COMMISSION (7-77) TE REPORT: LICENSEE EVENT REPORT REPORT DATE 4/29/77 CONTROL BLOCK:]() (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)](2)]0 DR S CONT REPORT 0 5 0 0 0 2 3 7 7 0 4 0 2 7 DOCKET NUMBER 68 69 EVENT DATE $[8]{1}{74}$ 0 1 L (6) SOURCE EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) During routine startup operations, CRD L-5 uncoupled and overtraveled when withdrawn 0 2 L-5 immediately inserted and disarmed. Startup operations resumed after to pos. 48. 0 3 determination that L-5's pos. and core location did not adversely affect core symmetry 0 4 Following startup overtravel check of L-5 proved satisfactory, verifying it was re-0 5 | coupled and operable. Because uncoupling occurred only when drive was fully with-0 6 drawn, safety implications were minimal. CRD uncouplings have occurred previously. 0 1.7 0 8 80 SYSTEM CAUSE SUBCODE CAUSE COMP VALVE CODE CODE COMPONENT CODE SUBCODE SUBCODE Z (15) RIB Α (12 F R D E (14 С Z 9 (13)(16 10 18 19 REVISION SEQUENTIAL OCCURRENCE REFORT EVENT YEAR REPORT NO. CODE TYPÉ NO. LER/RO REPORT 0 3 7 7 0 | 1|5 Х 1 NUMBER 28 32 ACTION FUTURE EFFECT ON PLANT ATTACHMENT SUBMITTED NPRD-4 FORM SUB COMPONENT SHUTDOWN PRIME COMP. HOURS (22) METHOD SUPPLIER MANUFACTURER G 0 8 0 (26) (18) Z (19) Z (20) Z (21) 0 0 0 0 Y (23) G <u>Y</u> (24) N (25 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27) 0 Unlatched inner filter and abnormally long uncoupling rod resulted in uncoupling of |CRD L-5 during startup. Since earlier overhaul of CRD L-5 on Jan. 1975, a pull test 1 1 on inner filter has been incorporated in overhaul & assembly procedure. Revised 1 2 procedure and improved OA coverage is believed adequate to prevent future CRD un-3 | couplings. 1 4 80 METHOD OF DISCOVERY FACILITY (30) % POWER OTHER STATUS DISCOVERY DESCRIPTION (32) C (28) 0 0 0 (29 • Operational Event NA A ((31) 9 10 ACTIVITY CONTENT 80 AMOUNT OF ACTIVITY (35 LOCATION OF RELEASE (36) RELEASED_OF RELEASE Z 33 Z 34 NA NA 10 10 11 PERSONNEL EXPOSURES 45 80 DESCRIPTION (39) NUMBER TYPE 0 0 0 (37) Z (38) NA 80 PERSONNEL INJURIES DESCRIPTION (41) NUMBER 0 0 40 8 0 NA 11 12 80 STATUTION DESCRIPTION Z (42) 9 NA 10 PUBLICITY 811090119 NA NRC USE ONLY DESCRIPTION (45) <u>N</u> (44 0 10 69 68 80 J, x265 Wujciga NAME OF PREPARER. PHONE File Protect in the second of the state of the اليريخ بيوا

ATTACHMENT TO LICENSEE EVENT REPORT 77-015/03X-1 COMMONWEALTH EDISON COMPANY (CWE) DRESDEN UNIT-2 (ILDRS-2) DOCKET # 050-237

During routine start-up operations, control rod drive (CRD) L-5 was found to uncouple and overtravel when withdrawn to position 48. L-5 was immediately inserted and electrically disarmed. Reactor start-up operations were resumed after it had been determined that the position and core location of the L-5 control rod did not adversely affect core symmetry. At a reactor power level of approximately 30%, L-5 was withdrawn to position 48 and checked for overtravel. The overtravel check proved satisfactory, verifying that CRD L-5 was recoupled and operable. Control rod drive/blade uncoupling incidents had occurred several times in the past.

Symptom and performance evaluations indicated that a loosened CRD inner filter could have 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 L-5 was withdrawn to position 48.

On November 30, 1977 CRD L-5 was disassembled and inspected per Control Rod Drive Inspection and Maintenance Procedure DMP 209. To assure a comprehensive inspection a special operating 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 + 0.750"). The abnormal length coupled with an unlatched inner filter resulted in the uncoupling of the CRD.

CRD L-5 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 this revised procedure have not experienced uncoupling. The revised procedure coupled with improved Quality Control coverage of CRD overhaul and reassembly are believed to be adequate to prevent future similar events.