NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

	Field	Value
0 1	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 0 1	REPORT SOURCE (6)	L
	DOCKET NUMBER (7)	0 5 0 0 0 2 3 7
	EVENT DATE (8)	0 4 0 8 8 3
	REPORT DATE (9)	0 5 0 5 8 3

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 While performing an inspection of valves 2-203-1B, 1C, 1D, AO-2-1601, and
0 3 2-220-58A, 58B, grease was discovered on each valve seat and disc. Local leak
0 4 rate tests (LLRT's) performed before inspection passed. LLRT's performed after
0 5 grease was removed failed except for 2-220-58A and 2-203-1B. Minimal effect
0 6 on public health and safety since all second isolation valves on each line
0 7 showed minimal leakage. First occurrence of this type.
0 8

0 9	SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
	S C	D	Z	V A L V E X	F	D

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 2 7	/	0 3	L	—	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)
H	G	C	Z	0 5 0 4	Y	Y	N	C 6 6 5

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Maintenance procedures did not prohibit personnel from placing grease on valve
1 1 seats. Grease was placed on valves to protect seat and disc surfaces during
1 2 repair. All grease was removed, valves repaired, and LLRT tested successfully.
1 3 Existing procedures will be reviewed and revised. A training module on use
1 4 of lubricants and sealants will be developed.

	FACILITY STATUS (28)	% POWER (29)	OTHER STATUS (30)	METHOD OF DISCOVERY (31)	DISCOVERY DESCRIPTION (32)
1 5	G	0 0 0	N/A	C	Required NRC Inspection

	ACTIVITY RELEASED (33)	CONTENT OF RELEASE (34)	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z	Z	N/A	N/A

PERSONNEL EXPOSURES

	NUMBER (37)	TYPE (38)	DESCRIPTION (39)
1 7	0 0 0	Z	N/A

PERSONNEL INJURIES

	NUMBER (40)	DESCRIPTION (41)
1 8	0 0 0	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE (42)	DESCRIPTION
1 9	Z	N/A

PUBLICITY

	ISSUED (44)	DESCRIPTION (45)	NRC USE ONLY
2 0	N	N/A	

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ATTACHMENT TO LICENSEE EVENT REPORT #83-27/03L-0
COMMONWEALTH EDISON COMPANY (CWE)
DRESDEN UNIT 2 (ILDRS-2)
DOCKET # 050-237

During the scheduled refueling outage, Mechanical Maintenance personnel inspected the seating surfaces of main steam isolation valves (MSIV's) 2-203-1B, 1C, and 1D as the result of an anonymous allegation made to the resident NRC inspector. All three valves had recently been repaired and successfully local leak rate tested. The valves were disassembled, inspected, and Dow Corning 111 grease was found on the disc and seat of each valve. The seating surface and disc of each valve was cleaned, the valves re-assembled, and local leak rate tests were performed. Valve 203-1B passed the local leak rate test without any further maintenance. However, valves 203-1C and 1D failed successive leak rate tests. The valves were disassembled again, the seats relapped, and the valves re-assembled. When all maintenance was completed and the valves rebuilt, both valves passed local leak rate tests. After grease had been discovered on the seating surface of each MSIV, a list of those valves in which the valve seat was exposed this outage and could have been potentially greased during maintenance or repair, was prepared. A total of twenty valves forming part of the primary containment isolation boundary, including the MSIV's, were identified. After the list had been studied, it was determined that there was reason to believe that three valves had greased seats (2-220-58A and 58B and 2-1601-61). Additionally, a sample of three of the remaining valves believed to be free of grease were selected for inspection to verify the condition.

The six additional valves were disassembled, inspected and grease was found as expected, on three of them. These were 2-220-58A and 58B and 2-1601-61. The seating surface of the three greased valves were cleaned and all six valves were reassembled. All six valves except 2-220-58B were successfully local leak rate tested without further maintenance. Valve 2-220-58B was disassembled once again, the "O" ring seating surface between the valve seat assembly and the valve body was relapped, and the "O" ring replaced. When the valve was re-assembled, it was successfully local leak rate tested.

On April 11, 1983, shortly after grease had been discovered on the seating surface of the three MSIV's, members of the NRC Regional Staff were notified of the deficiency. As a result of a telephone conference call made between D. J. Scott and D. L. Farrar of Commonwealth Edison and C.E. Norelius and other members of the NRC Regional Staff, six action items were agreed upon and later verified by a confirmatory action letter to Mr. Cordell Reed from James G. Keppler, dated April 13, 1983. A summary of the six action items agreed upon are listed as follows:

1. A review will be conducted of other isolation valves maintained during the current Unit 2 and the previous Unit 3 re-fueling outage. This review will be sufficiently comprehensive to eliminate concerns about the possible inappropriate use of grease during valves re-assemblies.

2. The Quality Control Department will review the event and develop standard inspection plans for isolation valve maintenance requiring valve disassembly and re-assembly.

3. A tailgate on the event will be prepared and presented to Mechanical Maintenance supervision in order to emphasize the critical nature of the decision to use lubricants where not specifically addressed in the procedure.

4. Existing maintenance procedures dealing with assembly and disassembly of valves will be reviewed and revised as necessary to ensure appropriate precautions and controls are in place as regard to the use of lubricants and sealants.

5. A training module will be prepared and incorporated into the maintenance training program dealing with the subject of the correct use of lubricants and sealants in various maintenance activities.

6. A repair manual will be developed specifically for disassembly and re-assembly of MSIV's.

In addition to the committment to complete the action items listed above, Commonwealth Edison performed an internal audit of the incident. A committee was formed to investigate the maintenance practice of using grease during the re-assembly of valves subject to post maintenance local leak rate tests. The goal of the committee was to investigate the particular circumstances involved in the usage of grease during the re-assembly of MSIV's 203-1B, 1C, and 1D and also to address the broader question of the implication of the maintenance practice on other critical valves at Dresden Station. As a result of the investigation, it was determined that the motivation behind the use of lubricants and/or grease in the re-assembly of the MSIV's and other valves was not to intentially bias the results of any local leak rate test, but to assist in the re-assembly of large and sometimes difficult to maintain equipment. Tracking of the six action items will be done via the AIR System to ensure follow-up and completion.

This incident had no effect on public health and safety since the second isolation valve for each line affected had minimal or no leakage. This was a first occurrence of this type.